```
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectData.sav'.
sort cases by item_number.
aggregate outfile = 'd:\datasets\dummy1.sav'
    /presorted
    /break = item_number
    /fst_mrch = min(ord_date).
execute.
match files file = *
          /table = 'd:\datasets\dummy1.sav'
              /by = item_number.
compute new = 0.
compute exi = 0.
if ((ord_date - fst_mrch) > 10000) exi = demand.
compute new = demand - exi.
sort cases by ord_date.
sort cases by household_id.
compute mr00 = 0.
compute mr01 = 0.
compute mr02 = 0.
compute mr03 = 0.
compute mr04 = 0.
compute mr05 = 0.
compute mr06 = 0.
compute mr07 = 0.
compute mr08 = 0.
compute mr09 = 0.
compute mr10 = 0.
compute mr11 = 0.
compute mr12 = 0.
compute mr13 = 0.
compute mr14 = 0.
compute mr15 = 0.
compute mr16 = 0.
compute mr17 = 0.
compute mr18 = 0.
compute mr19 = 0.
compute mr20 = 0.
compute mr21 = 0.
compute mr22 = 0.
compute mr23 = 0.
compute mr24 = 0.
compute mr25 = 0.
compute mr26 = 0.
compute mr27 = 0.
compute mr28 = 0.
compute mr29 = 0.
if (kev_mrch = 99) mr00 = demand.
if (kev_mrch = 00) mr00 = demand.
if (kev_mrch = 01) mr01 = demand.
if (kev_mrch = 02) mr02 = demand.
if (kev_mrch = 03) mr03 = demand.
if (kev_mrch = 04) mr04 = demand.
if (kev_mrch = 05) mr05 = demand.
if (kev_mrch = 06) mr06 = demand.
if (kev_mrch = 07) mr07 = demand.
if (kev_mrch = 08) mr08 = demand.
if (kev_mrch = 09) mr09 = demand.
if (kev_mrch = 10) mr10 = demand.
if (kev_mrch = 11) mr11 = demand.
if (kev_mrch = 12) mr12 = demand.
if (kev_mrch = 13) mr13 = demand.
if (kev_mrch = 14) mr14 = demand.
if (kev_mrch = 15) mr15 = demand.
if (kev_mrch = 16) mr16 = demand.
if (kev_mrch = 17) mr17 = demand.
if (kev_mrch = 18) mr18 = demand.
if (kev_mrch = 19) mr19 = demand.
if (kev_mrch = 20) mr20 = demand.
if (kev_mrch = 21) mr21 = demand.
if (kev_mrch = 22) mr22 = demand.
if (kev_mrch = 23) mr23 = demand.
if (kev_mrch = 24) mr24 = demand.
if (kev_mrch = 25) mr25 = demand.
if (kev_mrch = 26) mr26 = demand.
if (kev_mrch = 27) mr27 = demand.
if (kev_mrch = 28) mr28 = demand.
if (kev_mrch = 29) mr29 = demand.
formats mr00 to mr29(f8.2).
compute ch00 = 0.
compute ch01 = 0.
compute ch02 = 0.
```

```
          compute ch03 = 0.
          compute ch04 = 0.
          compute ch05 = 0.
          compute ch06 = 0.
          compute ch07 = 0.
          compute ch08 = 0.
          compute ch09 = 0.
          compute ch10 = 0.
          compute ch11 = 0.
          compute ch12 = 0.
          compute ch13 = 0.
          compute ch14 = 0.
          compute ch15 = 0.
          compute ch16 = 0.
          compute ch17 = 0.
          compute ch18 = 0.
          compute ch19 = 0.
          if (kev_chan = 99) ch00 = demand.
          if (kev_chan = 00) ch00 = demand.
          if (kev_chan = 01) ch01 = demand.
          if (kev_chan = 02) ch02 = demand.
          if (kev_chan = 03) ch03 = demand.
          if (kev_chan = 04) ch04 = demand.
          if (kev_chan = 05) ch05 = demand.
          if (kev_chan = 06) ch06 = demand.
          if (kev_chan = 07) ch07 = demand.
          if (kev_chan = 08) ch08 = demand.
          if (kev_chan = 09) ch09 = demand.
          if (kev_chan = 10) ch10 = demand.
          if (kev_chan = 11) ch11 = demand.
          if (kev_chan = 12) ch12 = demand.
          if (kev_chan = 13) ch13 = demand.
          if (kev_chan = 14) ch14 = demand.
          if (kev_chan = 15) ch15 = demand.
          if (kev_chan = 16) ch16 = demand.
          if (kev_chan = 17) ch17 = demand.
          if (kev_chan = 18) ch18 = demand.
          if (kev_chan = 19) ch19 = demand.
          formats ch00 to ch19(f8.2).
          *** Change DSC FSP MRG ***.
          compute dsc = 0.
          if (discounts > 0) dsc = demand.
          compute fsp = 0.
          if (shipping = 0) fsp = demand.
          compute mrg = kev_marg.
          formats dsc(f8.2) fsp(f8.2).
          aggregate outfile = *
             /presorted
             /break = household_id ord_date
             /dmd = sum(demand)
             /itm = sum(items)
             /mr00 mr01 mr02 mr03 mr04 mr05 mr06 mr07 mr08 mr09
              mr10 mr11 mr12 mr13 mr14 mr15 mr16 mr17 mr18 mr19
              mr20 mr21 mr22 mr23 mr24 mr25 mr26 mr27 mr28 mr29
              ch00 ch01 ch02 ch03 ch04 ch05 ch06 ch07 ch08 ch09
              ch10 ch11 ch12 ch13 ch14 ch15 ch16 ch17 ch18 ch19
              dsc fsp mrg new exi = sum
             (mr00 mr01 mr02 mr03 mr04 mr05 mr06 mr07 mr08 mr09
              mr10 mr11 mr12 mr13 mr14 mr15 mr16 mr17 mr18 mr19
              mr20 mr21 mr22 mr23 mr24 mr25 mr26 mr27 mr28 mr29
              ch00 ch01 ch02 ch03 ch04 ch05 ch06 ch07 ch08 ch09
              ch10 ch11 ch12 ch13 ch14 ch15 ch16 ch17 ch18 ch19
              dsc fsp mrg new exi).
          compute od = trunc(ord_date/100).
          formats od(f6.0).
          compute month = 999.
          if (od ge 200001) month = 001.
          if (od ge 200002) month = 002.
          if (od ge 200003) month = 003.
          if (od ge 200004) month = 004.
          if (od ge 200005) month = 005.
          if (od ge 200006) month = 006.
          if (od ge 200007) month = 007.
          if (od ge 200008) month = 008.
          if (od ge 200009) month = 009.
          if (od ge 200010) month = 010.
          if (od ge 200011) month = 011.
          if (od ge 200012) month = 012.
          if (od ge 200101) month = 013.
          if (od ge 200102) month = 014.
          if (od ge 200103) month = 015.
```

```
if (od ge 200104) month = 016.
if (od ge 200105) month = 017.
if (od ge 200106) month = 018.
if (od ge 200107) month = 019.
if (od ge 200108) month = 020.
if (od ge 200109) month = 021.
if (od ge 200110) month = 022.
if (od ge 200111) month = 023.
if (od ge 200112) month = 024.
if (od ge 200201) month = 025.
if (od ge 200202) month = 026.
if (od ge 200203) month = 027.
if (od ge 200204) month = 028.
if (od ge 200205) month = 029.
if (od ge 200206) month = 030.
if (od ge 200207) month = 031.
if (od ge 200208) month = 032.
if (od ge 200209) month = 033.
if (od ge 200210) month = 034.
if (od ge 200211) month = 035.
if (od ge 200212) month = 036.
if (od ge 200301) month = 037.
if (od ge 200302) month = 038.
if (od ge 200303) month = 039.
if (od ge 200304) month = 040.
if (od ge 200305) month = 041.
if (od ge 200306) month = 042.
if (od ge 200307) month = 043.
if (od ge 200308) month = 044.
if (od ge 200309) month = 045.
if (od ge 200310) month = 046.
if (od ge 200311) month = 047.
if (od ge 200312) month = 048.
if (od ge 200401) month = 049.
if (od ge 200402) month = 050.
if (od ge 200403) month = 051.
if (od ge 200404) month = 052.
if (od ge 200405) month = 053.
if (od ge 200406) month = 054.
if (od ge 200407) month = 055.
if (od ge 200408) month = 056.
if (od ge 200409) month = 057.
if (od ge 200410) month = 058.
if (od ge 200411) month = 059.
if (od ge 200412) month = 060.
if (od ge 200501) month = 061.
if (od ge 200502) month = 062.
if (od ge 200503) month = 063.
if (od ge 200504) month = 064.
if (od ge 200505) month = 065.
if (od ge 200506) month = 066.
if (od ge 200507) month = 067.
if (od ge 200508) month = 068.
if (od ge 200509) month = 069.
if (od ge 200510) month = 070.
if (od ge 200511) month = 071.
if (od ge 200512) month = 072.
if (od ge 200601) month = 073.
if (od ge 200602) month = 074.
if (od ge 200603) month = 075.
if (od ge 200604) month = 076.
if (od ge 200605) month = 077.
if (od ge 200606) month = 078.
if (od ge 200607) month = 079.
if (od ge 200608) month = 080.
if (od ge 200609) month = 081.
if (od ge 200610) month = 082.
if (od ge 200611) month = 083.
if (od ge 200612) month = 084.
if (od ge 200701) month = 085.
if (od ge 200702) month = 086.
if (od ge 200703) month = 087.
if (od ge 200704) month = 088.
if (od ge 200705) month = 089.
if (od ge 200706) month = 090.
if (od ge 200707) month = 091.
if (od ge 200708) month = 092.
if (od ge 200709) month = 093.
if (od ge 200710) month = 094.
if (od ge 200711) month = 095.
if (od ge 200712) month = 096.
```

```
if (od ge 200801) month = 097.
if (od ge 200802) month = 098.
if (od ge 200803) month = 099.
if (od ge 200804) month = 100.
if (od ge 200805) month = 101.
if (od ge 200806) month = 102.
if (od ge 200807) month = 103.
if (od ge 200808) month = 104.
if (od ge 200809) month = 105.
if (od ge 200810) month = 106.
if (od ge 200811) month = 107.
if (od ge 200812) month = 108.
if (od ge 200901) month = 109.
if (od ge 200902) month = 110.
if (od ge 200903) month = 111.
if (od ge 200904) month = 112.
if (od ge 200905) month = 113.
if (od ge 200906) month = 114.
if (od ge 200907) month = 115.
if (od ge 200908) month = 116.
if (od ge 200909) month = 117.
if (od ge 200910) month = 118.
if (od ge 200911) month = 119.
if (od ge 200912) month = 120.
if (od ge 201001) month = 121.
if (od ge 201002) month = 122.
if (od ge 201003) month = 123.
if (od ge 201004) month = 124.
if (od ge 201005) month = 125.
if (od ge 201006) month = 126.
if (od ge 201007) month = 127.
if (od ge 201008) month = 128.
if (od ge 201009) month = 129.
if (od ge 201010) month = 130.
if (od ge 201011) month = 131.
if (od ge 201012) month = 132.
if (od ge 201101) month = 133.
if (od ge 201102) month = 134.
if (od ge 201103) month = 135.
if (od ge 201104) month = 136.
if (od ge 201105) month = 137.
if (od ge 201106) month = 138.
if (od ge 201107) month = 139.
if (od ge 201108) month = 140.
if (od ge 201109) month = 141.
if (od ge 201110) month = 142.
if (od ge 201111) month = 143.
if (od ge 201112) month = 144.
if (od ge 201201) month = 145.
if (od ge 201202) month = 146.
if (od ge 201203) month = 147.
if (od ge 201204) month = 148.
if (od ge 201205) month = 149.
if (od ge 201206) month = 150.
if (od ge 201207) month = 151.
if (od ge 201208) month = 152.
if (od ge 201209) month = 153.
if (od ge 201210) month = 154.
if (od ge 201211) month = 155.
if (od ge 201212) month = 156.
if (od ge 201301) month = 157.
if (od ge 201302) month = 158.
if (od ge 201303) month = 159.
if (od ge 201304) month = 160.
if (od ge 201305) month = 161.
if (od ge 201306) month = 162.
if (od ge 201307) month = 163.
if (od ge 201308) month = 164.
if (od ge 201309) month = 165.
if (od ge 201310) month = 166.
if (od ge 201311) month = 167.
if (od ge 201312) month = 168.
if (od ge 201401) month = 169.
if (od ge 201402) month = 170.
if (od ge 201403) month = 171.
if (od ge 201404) month = 172.
if (od ge 201405) month = 173.
if (od ge 201406) month = 174.
if (od ge 201407) month = 175.
if (od ge 201408) month = 176.
if (od ge 201409) month = 177.
```

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if (od ge 201410) month = 178.
if (od ge 201411) month = 179.
if (od ge 201412) month = 180.
if (od ge 201501) month = 181.
if (od ge 201502) month = 182.
if (od ge 201503) month = 183.
if (od ge 201504) month = 184.
if (od ge 201505) month = 185.
if (od ge 201506) month = 186.
if (od ge 201507) month = 187.
if (od ge 201508) month = 188.
if (od ge 201509) month = 189.
if (od ge 201510) month = 190.
if (od ge 201511) month = 191.
if (od ge 201512) month = 192.
if (od ge 201601) month = 193.
if (od ge 201602) month = 194.
if (od ge 201603) month = 195.
if (od ge 201604) month = 196.
if (od ge 201605) month = 197.
if (od ge 201606) month = 198.
if (od ge 201607) month = 199.
if (od ge 201608) month = 200.
if (od ge 201609) month = 201.
if (od ge 201610) month = 202.
if (od ge 201611) month = 203.
if (od ge 201612) month = 204.
if (od ge 201701) month = 205.
if (od ge 201702) month = 206.
if (od ge 201703) month = 207.
if (od ge 201704) month = 208.
if (od ge 201705) month = 209.
if (od ge 201706) month = 210.
if (od ge 201707) month = 211.
if (od ge 201708) month = 212.
if (od ge 201709) month = 213.
if (od ge 201710) month = 214.
if (od ge 201711) month = 215.
if (od ge 201712) month = 216.
if (od ge 201801) month = 217.
if (od ge 201802) month = 218.
if (od ge 201803) month = 219.
if (od ge 201804) month = 220.
if (od ge 201805) month = 221.
if (od ge 201806) month = 222.
if (od ge 201807) month = 223.
if (od ge 201808) month = 224.
if (od ge 201809) month = 225.
if (od ge 201810) month = 226.
if (od ge 201811) month = 227.
if (od ge 201812) month = 228.
if (od ge 201901) month = 229.
if (od ge 201902) month = 230.
if (od ge 201903) month = 231.
if (od ge 201904) month = 232.
if (od ge 201905) month = 233.
if (od ge 201906) month = 234.
if (od ge 201907) month = 235.
if (od ge 201908) month = 236.
if (od ge 201909) month = 237.
if (od ge 201910) month = 238.
if (od ge 201911) month = 239.
if (od ge 201912) month = 240.
if (od ge 202001) month = 241.
if (od ge 202002) month = 242.
if (od ge 202003) month = 243.
if (od ge 202004) month = 244.
if (od ge 202005) month = 245.
if (od ge 202006) month = 246.
if (od ge 202007) month = 247.
if (od ge 202008) month = 248.
if (od ge 202009) month = 249.
if (od ge 202010) month = 250.
if (od ge 202011) month = 251.
if (od ge 202012) month = 252.
formats month(f3.0).
value labels month
   001 'Jan00'
   002 'Feb00'
   003 'Mar00'
   004 'Apr00'
```

```
005 'May00'
006 'Jun00'
007 'Jul00'
008 'Aug00'
009 'Sep00'
010 'Oct00'
011 'Nov00'
012 'Dec00'
013 'Jan01'
014 'Feb01'
015 'Mar01'
016 'Apr01'
017 'May01'
018 'Jun01'
019 'Jul01'
020 'Aug01'
021 'Sep01'
022 'Oct01'
023 'Nov01'
024 'Dec01'
025 'Jan02'
026 'Feb02'
027 'Mar02'
028 'Apr02'
029 'May02'
030 'Jun02'
031 'Jul02'
032 'Aug02'
033 'Sep02'
034 'Oct02'
035 'Nov02'
036 'Dec02'
037 'Jan03'
038 'Feb03'
039 'Mar03'
040 'Apr03'
041 'May03'
042 'Jun03'
043 'Jul03'
044 'Aug03'
045 'Sep03'
046 'Oct03'
047 'Nov03'
048 'Dec03'
049 'Jan04'
050 'Feb04'
051 'Mar04'
052 'Apr04'
053 'May04'
054 'Jun04'
055 'Jul04'
056 'Aug04'
057 'Sep04'
058 'Oct04'
059 'Nov04'
060 'Dec04'
061 'Jan05'
062 'Feb05'
063 'Mar05'
064 'Apr05'
065 'May05'
066 'Jun05'
067 'Jul05'
068 'Aug05'
069 'Sep05'
070 'Oct05'
071 'Nov05'
072 'Dec05'
073 'Jan06'
074 'Feb06'
075 'Mar06'
076 'Apr06'
077 'May06'
078 'Jun06'
079 'Jul06'
080 'Aug06'
081 'Sep06'
082 'Oct06'
083 'Nov06'
084 'Dec06'
085 'Jan07'
```

```
086 'Feb07'
087 'Mar07'
088 'Apr07'
089 'May07'
090 'Jun07'
091 'Jul07'
092 'Aug07'
093 'Sep07'
094 'Oct07'
095 'Nov07'
096 'Dec07'
097 'Jan08'
098 'Feb08'
099 'Mar08'
100 'Apr08'
101 'May08'
102 'Jun08'
103 'Jul08'
104 'Aug08'
105 'Sep08'
106 'Oct08'
107 'Nov08'
108 'Dec08'
109 'Jan09'
110 'Feb09'
111 'Mar09'
112 'Apr09'
113 'May09'
114 'Jun09'
115 'Jul09'
116 'Aug09'
117 'Sep09'
118 'Oct09'
119 'Nov09'
120 'Dec09'
121 'Jan10'
122 'Feb10'
123 'Mar10'
124 'Apr10'
125 'May10'
126 'Jun10'
127 'Jul10'
128 'Aug10'
129 'Sep10'
130 'Oct10'
131 'Nov10'
132 'Dec10'
133 'Jan11'
134 'Feb11'
135 'Mar11'
136 'Apr11'
137 'May11'
138 'Jun11'
139 'Jul11'
140 'Aug11'
141 'Sep11'
142 'Oct11'
143 'Nov11'
144 'Dec11'
145 'Jan12'
146 'Feb12'
147 'Mar12'
148 'Apr12'
149 'May12'
150 'Jun12'
151 'Jul12'
152 'Aug12'
153 'Sep12'
154 'Oct12'
155 'Nov12'
156 'Dec12'
157 'Jan13'
158 'Feb13'
159 'Mar13'
160 'Apr13'
161 'Mar13'
162 'Jun13'
163 'Jul13'
164 'Aug13'
165 'Sep13'
166 'Oct13'
```

```
167  'Nov13'
168  'Dec13'
169  'Jan14'
170  'Feb14'
171  'Mar14'
172  'Apr14'
173  'May14'
174  'Jun14'
175  'Jul14'
176  'Aug14'
177  'Sep14'
178  'Oct14'
179  'Nov14'
180  'Dec14'
181  'Jan15'
182  'Feb15'
183  'Mar15'
184  'Apr15'
185  'May15'
186  'Jun15'
187  'Jul15'
188  'Aug15'
189  'Sep15'
190  'Oct15'
191  'Nov15'
192  'Dec15'
193  'Jan16'
194  'Feb16'
195  'Mar16'
196  'Apr16'
197  'May16'
198  'Jun16'
199  'Jul16'
200  'Aug16'
201  'Sep16'
202  'Oct16'
203  'Nov16'
204  'Dec16'
205  'Jan17'
206  'Feb17'
207  'Mar17'
208  'Apr17'
209  'May17'
210  'Jun17'
211  'Jul17'
212  'Aug17'
213  'Sep17'
214  'Oct17'
215  'Nov17'
216  'Dec17'
217  'Jan18'
218  'Feb18'
219  'Mar18'
220  'Apr18'
221  'May18'
222  'Jun18'
223  'Jul18'
224  'Aug18'
225  'Sep18'
226  'Oct18'
227  'Nov18'
228  'Dec18'
229  'Jan19'
230  'Feb19'
231  'Mar19'
232  'Apr19'
233  'May19'
234  'Jun19'
235  'Jul19'
236  'Aug19'
237  'Sep19'
238  'Oct19'
239  'Nov19'
240  'Dec19'
241  'Jan20'
242  'Feb20'
243  'Mar20'
244  'Apr20'
245  'May20'
246  'Jun20'
247  'Jul20'
```

```
      248 'Aug20'
      249 'Sep20'
      250 'Oct20'
      251 'Nov20'
      252 'Dec20'.
compute #a = #a + 1.
if lag(household_id) ne (household_id) #a = 1.
compute order = #a.
formats order(f3.0).
execute.
*** End of Data Prep - Save The File ***.
frequencies variables = month order.
compute dummy = 0.
aggregate outfile = 'd:\datasets\dummy.sav'
   /presorted
   /break = dummy
   /peak = max(month).
execute.
match files file = *
          /table = 'd:\datasets\dummy.sav'
              /by = dummy.
execute.
compute peak = peak + 1.
formats peak(f3.0).
DESCRIPTIVES VARIABLES = dmd itm
   mr00 mr01 mr02 mr03 mr04 mr05 mr06 mr07 mr08 mr09
   mr10 mr11 mr12 mr13 mr14 mr15 mr16 mr17 mr18 mr19
   mr20 mr21 mr22 mr23 mr24 mr25 mr26 mr27 mr28 mr29
   ch00 ch01 ch02 ch03 ch04 ch05 ch06 ch07 ch08 ch09
   ch10 ch11 ch12 ch13 ch14 ch15 ch16 ch17 ch18 ch19
   dsc fsp mrg new exi peak
  /STATISTICS=MEAN MIN MAX.
execute.
save outfile = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'
   /keep = household_id ord_date month order dmd itm
          mr00 to mr29
          ch00 to ch19
          dsc fsp mrg new exi peak.
execute.
*** Identify First Order Date ***.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute #a = #a + 1.
if lag(household_id) ne (household_id) #a = 1.
compute order = #a.
execute.
select if (order = 1).
compute fst_month = month.
formats month(f4.0).
compute fst_chan = 0.
if (ch19 > 0) fst_chan = 19.
if (ch18 > 0) fst_chan = 18.
if (ch17 > 0) fst_chan = 17.
if (ch16 > 0) fst_chan = 16.
if (ch15 > 0) fst_chan = 15.
if (ch14 > 0) fst_chan = 14.
if (ch13 > 0) fst_chan = 13.
if (ch12 > 0) fst_chan = 12.
if (ch11 > 0) fst_chan = 11.
if (ch10 > 0) fst_chan = 10.
if (ch09 > 0) fst_chan = 09.
if (ch08 > 0) fst_chan = 08.
if (ch07 > 0) fst_chan = 07.
if (ch06 > 0) fst_chan = 06.
if (ch05 > 0) fst_chan = 05.
if (ch04 > 0) fst_chan = 04.
if (ch03 > 0) fst_chan = 03.
if (ch02 > 0) fst_chan = 02.
if (ch01 > 0) fst_chan = 01.
formats fst_chan(f2.0).
save outfile = 'd:\datasets\dummy.sav'
   /keep = household_id fst_month fst_chan.
execute.
match files file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'
          /table = 'd:\datasets\dummy.sav'
              /by = household_id.
execute.
save outfile = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
execute.
```

```
*******************************************************************************************************.
*** Rolling 12 Month Analysis of Key Metrics ********************************************************.
*******************************************************************************************************.
define mac12().
select if (month le time) and (month gt (time - 012)).
compute frq = 1.
aggregate outfile = *
   /presorted
   /break = household_id time
   /dmd = sum(dmd)
   /itm = sum(itm)
   /frq = sum(frq)
   /new exi dsc fsp mrg = sum(new exi dsc fsp mrg)
   /mr00 mr01 mr02 mr03 mr04 mr05 mr06 mr07 mr08 mr09
    mr10 mr11 mr12 mr13 mr14 mr15 mr16 mr17 mr18 mr19
    mr20 mr21 mr22 mr23 mr24 mr25 mr26 mr27 mr28 mr29
    ch00 ch01 ch02 ch03 ch04 ch05 ch06 ch07 ch08 ch09
    ch10 ch11 ch12 ch13 ch14 ch15 ch16 ch17 ch18 ch19 = sum
   (mr00 mr01 mr02 mr03 mr04 mr05 mr06 mr07 mr08 mr09
    mr10 mr11 mr12 mr13 mr14 mr15 mr16 mr17 mr18 mr19
    mr20 mr21 mr22 mr23 mr24 mr25 mr26 mr27 mr28 mr29
    ch00 ch01 ch02 ch03 ch04 ch05 ch06 ch07 ch08 ch09
    ch10 ch11 ch12 ch13 ch14 ch15 ch16 ch17 ch18 ch19).
compute byr = 1.
aggregate outfile = *
   /presorted
   /break = time
   /byr = sum(byr)
   /dmd = sum(dmd)
   /itm = sum(itm)
   /frq = sum(frq)
   /new exi dsc fsp mrg = sum(new exi dsc fsp mrg)
   /mr00 mr01 mr02 mr03 mr04 mr05 mr06 mr07 mr08 mr09
    mr10 mr11 mr12 mr13 mr14 mr15 mr16 mr17 mr18 mr19
    mr20 mr21 mr22 mr23 mr24 mr25 mr26 mr27 mr28 mr29
    ch00 ch01 ch02 ch03 ch04 ch05 ch06 ch07 ch08 ch09
    ch10 ch11 ch12 ch13 ch14 ch15 ch16 ch17 ch18 ch19 = sum
   (mr00 mr01 mr02 mr03 mr04 mr05 mr06 mr07 mr08 mr09
    mr10 mr11 mr12 mr13 mr14 mr15 mr16 mr17 mr18 mr19
    mr20 mr21 mr22 mr23 mr24 mr25 mr26 mr27 mr28 mr29
    ch00 ch01 ch02 ch03 ch04 ch05 ch06 ch07 ch08 ch09
    ch10 ch11 ch12 ch13 ch14 ch15 ch16 ch17 ch18 ch19).
formats byr to ch19(f10.0).
compute fby = frq / byr.
compute ior = itm / frq.
compute pri = dmd / itm.
compute aov = dmd / frq.
compute dby = dmd / byr.
formats fby to dby(f7.3) time(f4.0).
value labels time
   001 'Jan00'
   002 'Feb00'
   003 'Mar00'
   004 'Apr00'
   005 'May00'
   006 'Jun00'
   007 'Jul00'
   008 'Aug00'
   009 'Sep00'
   010 'Oct00'
   011 'Nov00'
   012 'Dec00'
   013 'Jan01'
   014 'Feb01'
   015 'Mar01'
   016 'Apr01'
   017 'May01'
   018 'Jun01'
   019 'Jul01'
   020 'Aug01'
   021 'Sep01'
   022 'Oct01'
   023 'Nov01'
   024 'Dec01'
   025 'Jan02'
   026 'Feb02'
   027 'Mar02'
   028 'Apr02'
   029 'May02'
   030 'Jun02'
   031 'Jul02'
```

```
032 'Aug02'
033 'Sep02'
034 'Oct02'
035 'Nov02'
036 'Dec02'
037 'Jan03'
038 'Feb03'
039 'Mar03'
040 'Apr03'
041 'May03'
042 'Jun03'
043 'Jul03'
044 'Aug03'
045 'Sep03'
046 'Oct03'
047 'Nov03'
048 'Dec03'
049 'Jan04'
050 'Feb04'
051 'Mar04'
052 'Apr04'
053 'May04'
054 'Jun04'
055 'Jul04'
056 'Aug04'
057 'Sep04'
058 'Oct04'
059 'Nov04'
060 'Dec04'
061 'Jan05'
062 'Feb05'
063 'Mar05'
064 'Apr05'
065 'May05'
066 'Jun05'
067 'Jul05'
068 'Aug05'
069 'Sep05'
070 'Oct05'
071 'Nov05'
072 'Dec05'
073 'Jan06'
074 'Feb06'
075 'Mar06'
076 'Apr06'
077 'May06'
078 'Jun06'
079 'Jul06'
080 'Aug06'
081 'Sep06'
082 'Oct06'
083 'Nov06'
084 'Dec06'
085 'Jan07'
086 'Feb07'
087 'Mar07'
088 'Apr07'
089 'May07'
090 'Jun07'
091 'Jul07'
092 'Aug07'
093 'Sep07'
094 'Oct07'
095 'Nov07'
096 'Dec07'
097 'Jan08'
098 'Feb08'
099 'Mar08'
100 'Apr08'
101 'May08'
102 'Jun08'
103 'Jul08'
104 'Aug08'
105 'Sep08'
106 'Oct08'
107 'Nov08'
108 'Dec08'
109 'Jan09'
110 'Feb09'
111 'Mar09'
112 'Apr09'
```

```
113 'May09'
114 'Jun09'
115 'Jul09'
116 'Aug09'
117 'Sep09'
118 'Oct09'
119 'Nov09'
120 'Dec09'
121 'Jan10'
122 'Feb10'
123 'Mar10'
124 'Apr10'
125 'May10'
126 'Jun10'
127 'Jul10'
128 'Aug10'
129 'Sep10'
130 'Oct10'
131 'Nov10'
132 'Dec10'
133 'Jan11'
134 'Feb11'
135 'Mar11'
136 'Apr11'
137 'May11'
138 'Jun11'
139 'Jul11'
140 'Aug11'
141 'Sep11'
142 'Oct11'
143 'Nov11'
144 'Dec11'
145 'Jan12'
146 'Feb12'
147 'Mar12'
148 'Apr12'
149 'May12'
150 'Jun12'
151 'Jul12'
152 'Aug12'
153 'Sep12'
154 'Oct12'
155 'Nov12'
156 'Dec12'
157 'Jan13'
158 'Feb13'
159 'Mar13'
160 'Apr13'
161 'Mar13'
162 'Jun13'
163 'Jul13'
164 'Aug13'
165 'Sep13'
166 'Oct13'
167 'Nov13'
168 'Dec13'
169 'Jan14'
170 'Feb14'
171 'Mar14'
172 'Apr14'
173 'May14'
174 'Jun14'
175 'Jul14'
176 'Aug14'
177 'Sep14'
178 'Oct14'
179 'Nov14'
180 'Dec14'
181 'Jan15'
182 'Feb15'
183 'Mar15'
184 'Apr15'
185 'May15'
186 'Jun15'
187 'Jul15'
188 'Aug15'
189 'Sep15'
190 'Oct15'
191 'Nov15'
192 'Dec15'
193 'Jan16'
```

```
    194 'Feb16'
    195 'Mar16'
    196 'Apr16'
    197 'May16'
    198 'Jun16'
    199 'Jul16'
    200 'Aug16'
    201 'Sep16'
    202 'Oct16'
    203 'Nov16'
    204 'Dec16'
    205 'Jan17'
    206 'Feb17'
    207 'Mar17'
    208 'Apr17'
    209 'May17'
    210 'Jun17'
    211 'Jul17'
    212 'Aug17'
    213 'Sep17'
    214 'Oct17'
    215 'Nov17'
    216 'Dec17'
    217 'Jan18'
    218 'Feb18'
    219 'Mar18'
    220 'Apr18'
    221 'May18'
    222 'Jun18'
    223 'Jul18'
    224 'Aug18'
    225 'Sep18'
    226 'Oct18'
    227 'Nov18'
    228 'Dec18'
    229 'Jan19'
    230 'Feb19'
    231 'Mar19'
    232 'Apr19'
    233 'May19'
    234 'Jun19'
    235 'Jul19'
    236 'Aug19'
    237 'Sep19'
    238 'Oct19'
    239 'Nov19'
    240 'Dec19'
    241 'Jan20'
    242 'Feb20'
    243 'Mar20'
    244 'Apr20'
    245 'May20'
    246 'Jun20'
    247 'Jul20'
    248 'Aug20'
    249 'Sep20'
    250 'Oct20'
    251 'Nov20'
    252 'Dec20'.
execute.
!enddefine.
execute.
****************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 001).
mac12.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
****************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 002).
mac12.
add files file = 'd:\datasets\rolling12.sav'
         /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
****************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 003).
mac12.
```

```
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 004).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 005).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 006).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 007).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 008).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 009).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 010).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 011).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 012).
mac12.
```

```
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
***********************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 013).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
***********************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 014).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
***********************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 015).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
***********************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 016).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
***********************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 017).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
***********************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 018).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
***********************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 019).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
***********************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 020).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
***********************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 021).
mac12.
```

```
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 022).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 023).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 024).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 025).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 026).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 027).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 028).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 029).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*************************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 030).
mac12.
```

```
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*******************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 031).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*******************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 032).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*******************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 033).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*******************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 034).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*******************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 035).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
*******************************************************************************************.
get file = 'd:\datasets\Kevin_Hillstrom_MineThatData_ProjectTemplate.sav'.
compute Time =(peak - 036).
mac12.
add files file = 'd:\datasets\rolling12.sav'
        /file = *.
execute.
save outfile = 'd:\datasets\rolling12.sav'.
execute.
get file = 'd:\datasets\rolling12.sav'.
compute oby = frq / byr.
compute ior = itm / frq.
compute pri = dmd / itm.
compute aov = dmd / frq.
compute dby = dmd / byr.
*compute mr00 = dmd - mr01.
GRAPH
  /LINE(SIMPLE)=MEAN(byr) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(dmd) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(itm) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(frq) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(oby) BY time.
execute.
```

```
GRAPH
  /LINE(SIMPLE)=MEAN(ior) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(pri) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(aov) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(dby) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(new) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(exi) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(dsc) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(fsp) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mrg) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr00) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr01) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr02) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr03) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr04) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr05) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr06) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr07) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr08) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr09) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr10) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr11) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr12) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr13) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr14) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr15) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr16) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(mr17) BY time.
execute.
```

```
GRAPH
   /LINE(SIMPLE)=MEAN(mr18) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(mr19) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(mr20) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(mr21) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(mr22) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(mr23) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(mr24) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(mr25) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(mr26) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(mr27) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(mr28) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(mr29) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch00) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch01) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch02) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch03) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch04) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch05) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch06) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch07) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch08) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch09) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch10) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch11) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch12) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch13) BY time.
execute.
GRAPH
   /LINE(SIMPLE)=MEAN(ch14) BY time.
execute.
```

```
GRAPH
  /LINE(SIMPLE)=MEAN(ch15) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(ch16) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(ch17) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(ch18) BY time.
execute.
GRAPH
  /LINE(SIMPLE)=MEAN(ch19) BY time.
execute.
```