```
OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
NOTE: ODS statements in the SAS Studio environment may disable some output features.
70
           /* Start station ID */
71
           title bold "3a - Start Station ID";
72
           proc freq data=work.file order=freq;
73
           tables start_station_id;
           run;
NOTE: There were 47662 observations read from the data set WORK.FILE.
NOTE: PROCEDURE FREQ used (Total process time):
      real time
                          0.08 seconds
      user cpu time
                          0.08 seconds
      system cpu time
                          0.01 seconds
      memory
                          3044.96k
      OS Memory
                          29608.00k
                          05/06/2022 09:05:29 AM
      Timestamp
      Step Count
                                         50 Switch Count 3
      Page Faults
                                         a
      Page Reclaims
                                         358
      Page Swaps
                                         a
      Voluntary Context Switches
                                         14
      Involuntary Context Switches
                                         0
      Block Input Operations
                                         0
      Block Output Operations
                                         280
75
76
           ods graphics / reset width=6.4in height=8in imagemap;
77
78
           proc sgplot data=WORK.ASSIGNMENT;
           title height=14pt "Start Station ID";
79
ลด
           hbar start_station_id / fillattrs=(color=CX5084d3) datalabel fillType=gradient
81
           stat=percent;
           xaxis max=0.1 grid;
82
83
           run;
NOTE: PROCEDURE SGPLOT used (Total process time):
      real time
                          0.20 seconds
      user cpu time
                          0.08 seconds
      system cpu time
                          0.02 seconds
      memory
                          10228.75k
      OS Memory
                          37388.00k
      Timestamp
                          05/06/2022 09:05:30 AM
                                         51 Switch Count 5
      Step Count
      Page Faults
                                         0
      Page Reclaims
                                         2900
      Page Swaps
                                         a
      Voluntary Context Switches
                                         407
      Involuntary Context Switches
                                         1
      Block Input Operations
                                         0
      Block Output Operations
                                         712
WARNING: The data labels are suppressed. Use DATALABELFITPOLICY=NONE to force the labels to be displayed.
NOTE: Some of the tick values have been thinned.
NOTE: There were 47662 observations read from the data set WORK.ASSIGNMENT.
84
85
           ods graphics / reset;
86
           title;
87
           /* End Station ID */
88
           title bold "3b - End Station ID";
89
           proc freq data=work.file order=freq;
90
91
           tables end_station_id;
92
           run:
NOTE: There were 47662 observations read from the data set WORK.FILE.
NOTE: PROCEDURE FREQ used (Total process time):
      real time
                          0.09 seconds
      user cpu time
                          0.09 seconds
      system cpu time
                          0.01 seconds
                          2168.09k
      memory
      OS Memory
                          37800.00k
      Timestamp
                          05/06/2022 09:05:30 AM
      Step Count
                                         52 Switch Count 2
      Page Faults
                                         0
      Page Reclaims
                                         324
      Page Swaps
                                         a
```

```
Voluntary Context Switches
                                         14
      Involuntary Context Switches
                                         0
      Block Input Operations
                                         0
      Block Output Operations
                                         296
93
94
           ods graphics / reset width=6.4in height=8in imagemap;
95
96
           proc sgplot data=WORK.ASSIGNMENT;
97
           title height=14pt "End Station ID";
           hbar end_station_id / fillattrs=(color=CXd9261c) datalabel fillType=gradient
98
99
           stat=percent;
100
           xaxis grid;
101
           run;
NOTE: PROCEDURE SGPLOT used (Total process time):
      real time
                          0.20 seconds
                          0.08 seconds
      user cpu time
      system cpu time
                          0.01 seconds
                          4389.40k
      memorv
      OS Memory
                          39076,00k
                          05/06/2022 09:05:30 AM
      Timestamp
      Step Count
                                         53 Switch Count 5
      Page Faults
                                         0
      Page Reclaims
                                         1383
      Page Swaps
                                         а
      Voluntary Context Switches
                                         465
                                         a
      Involuntary Context Switches
      Block Input Operations
                                         0
      Block Output Operations
                                         720
WARNING: The data labels are suppressed. Use DATALABELFITPOLICY=NONE to force the labels to be displayed.
NOTE: Some of the tick values have been thinned.
NOTE: There were 47662 observations read from the data set WORK.ASSIGNMENT.
102
103
           ods graphics / reset;
104
           title;
105
           /* Casual & Member Customer */
106
107
           title bold "3c - Casual & Member Customer";
108
           proc freq data=work.file order=freq;
109
           tables member_casual;
110
           run;
NOTE: There were 47662 observations read from the data set WORK.FILE.
NOTE: PROCEDURE FREQ used (Total process time):
      real time
                          0.02 seconds
      user cpu time
                          0.02 seconds
      system cpu time
                          0.01 seconds
                          2169.21k
      memory
                          37544,00k
      OS Memory
      Timestamp
                          05/06/2022 09:05:30 AM
      Step Count
                                         54 Switch Count 3
                                         a
      Page Faults
                                         354
      Page Reclaims
      Page Swaps
                                         a
      Voluntary Context Switches
                                         12
      Involuntary Context Switches
                                         0
      Block Input Operations
                                         0
      Block Output Operations
                                         264
111
112
           ods graphics / reset width=6.4in height=4.8in imagemap;
113
114
           proc sgplot data=WORK.ASSIGNMENT;
           title height=14pt "Casual & Members";
115
           vbar member_casual / fillattrs=(color=CX5084d3) datalabel fillType=gradient
116
117
           stat=percent;
118
           yaxis max=1 grid;
119
           run;
NOTE: PROCEDURE SGPLOT used (Total process time):
                          0.10 seconds
      real time
      user cpu time
                          0.05 seconds
                          0.01 seconds
      system cpu time
                          3758.07k
      memory
      OS Memory
                          38828.00k
      Timestamp
                          05/06/2022 09:05:30 AM
```

```
Step Count
                                         55 Switch Count 5
      Page Faults
                                         0
                                        1040
      Page Reclaims
      Page Swaps
      Voluntary Context Switches
                                         165
      Involuntary Context Switches
                                         0
      Block Input Operations
                                         0
      Block Output Operations
                                         400
NOTE: There were 47662 observations read from the data set WORK.ASSIGNMENT.
120
121
           ods graphics / reset;
122
           title;
123
124
           /* Duration */
           title bold "3d - Duration";
125
           data work.filetimings;
126
           set work.file;
127
128
           DurationMin=intck('minute', starttime, endtime);
129
           run;
NOTE: There were 47662 observations read from the data set WORK.FILE.
NOTE: The data set WORK.FILETIMINGS has 47662 observations and 17 variables.
NOTE: DATA statement used (Total process time):
      real time
                          0.02 seconds
      user cpu time
                          0.00 seconds
      system cpu time
                          0.02 seconds
                          3567.12k
      memory
      OS Memory
                          39336.00k
      Timestamp
                          05/06/2022 09:05:30 AM
      Step Count
                                         56 Switch Count 3
      Page Faults
                                         0
      Page Reclaims
                                        576
      Page Swaps
                                         0
      Voluntary Context Switches
                                        14
      Involuntary Context Switches
                                         0
      Block Input Operations
                                         a
      Block Output Operations
                                        20240
130
131
           data work.filetime;
132
           set work.filetimings;
133
           DurationMin = intck('minute', starttime, endtime);
134
           run;
NOTE: There were 47662 observations read from the data set WORK.FILETIMINGS.
NOTE: The data set WORK.FILETIME has 47662 observations and 17 variables.
NOTE: DATA statement used (Total process time):
                          0.02 seconds
      real time
      user cpu time
                          0.01 seconds
      system cpu time
                          0.02 seconds
      memory
                          3569.50k
      OS Memory
                          39336.00k
      Timestamp
                          05/06/2022 09:05:30 AM
      Step Count
                                         57
                                            Switch Count 3
      Page Faults
                                         9
      Page Reclaims
                                        567
      Page Swaps
                                         a
      Voluntary Context Switches
                                        14
      Involuntary Context Switches
                                         0
      Block Input Operations
                                         а
      Block Output Operations
                                         20232
135
           proc freq data=work.filetime order=freq;
136
137
              tables DurationMin /
                  plots=freqplot(twoway=stacked orient=horizontal);
138
139
NOTE: There were 47662 observations read from the data set WORK.FILETIME.
NOTE: PROCEDURE FREQ used (Total process time):
      real time
                          0.38 seconds
      user cpu time
                          0.31 seconds
                          0.00 seconds
      system cpu time
                          3982.53k
      memory
      OS Memory
                          38448,00k
      Timestamp
                          05/06/2022 09:05:30 AM
      Step Count
                                         58 Switch Count 3
```

```
Page Faults
                                         0
      Page Reclaims
                                         636
      Page Swaps
                                         0
      Voluntary Context Switches
                                         1102
      Involuntary Context Switches
                                         1
      Block Input Operations
                                         0
      Block Output Operations
                                         784
140
141
142
143
144
           /* maps */
145
146
           title bold "3e - Maps";
147
148
           proc sgplot data=work.file noborder noautolegend;
149
           polygon x=Start_lat y=Start_lng id=Start_Station_id / fill outline tip=none
150
           lineattrs=(color=gray99) fillattrs=(color=cxe8edd5);
           scatter x=Start_lat y=Start_lng / markerattrs=(symbol=circlefilled size=13)
151
152
           markerfillattrs=(color=yellow) markeroutlineattrs=(color=purple);
153
           xaxis display=none;
           yaxis display=none;
154
155
           run:
NOTE: PROCEDURE SGPLOT used (Total process time):
                          4.69 seconds
      real time
                          2.58 seconds
      user cpu time
      system cpu time
                          0.27 seconds
                          3210.15k
      memory
      OS Memory
                          38188.00k
                          05/06/2022 09:05:35 AM
      Timestamp
      Step Count
                                         59 Switch Count 2
      Page Faults
                                         a
      Page Reclaims
                                         696
      Page Swaps
                                         9
      Voluntary Context Switches
                                         143129
      Involuntary Context Switches
                                         0
      Block Input Operations
                                         0
      Block Output Operations
                                         1848
NOTE: Marker and line antialiasing has been disabled for at least one plot because the threshold has been reached. You can set
      ANTIALIASMAX=47700 in the ODS GRAPHICS statement to enable antialiasing for all plots.
NOTE: There were 47662 observations read from the data set WORK.FILE.
156
157
           proc sgplot data=work.file noborder noautolegend;
           polygon x=end_lat y=end_lng id=End_Station_id / fill outline tip=none
158
159
           lineattrs=(color=gray99) fillattrs=(color=cxe8edd5);
           scatter x=end_lat y=end_lng / markerattrs=(symbol=circlefilled size=13)
160
           markerfillattrs=(color=yellow) markeroutlineattrs=(color=purple);
161
162
           xaxis display=none;
163
           yaxis display=none;
164
           run:
NOTE: PROCEDURE SGPLOT used (Total process time):
      real time
                          4.56 seconds
      user cpu time
                          2.58 seconds
      system cpu time
                          0.25 seconds
      memory
                          3416.34k
      OS Memory
                          38188.00k
                          05/06/2022 09:05:40 AM
      Timestamp
                                         60 Switch Count 2
      Step Count
      Page Faults
                                         a
      Page Reclaims
                                         672
      Page Swaps
                                         0
      Voluntary Context Switches
                                         143134
      Involuntary Context Switches
                                         2
      Block Input Operations
                                         9
      Block Output Operations
                                         1856
NOTE: Marker and line antialiasing has been disabled for at least one plot because the threshold has been reached. You can set
      ANTIALIASMAX=47700 in the ODS GRAPHICS statement to enable antialiasing for all plots.
NOTE: There were 47662 observations read from the data set WORK.FILE.
165
166
           /* Member Start Station Name */
167
168
           title bold "3f - Member Start Station Name";
169
           proc sort data=work.file;
```

```
170
           by member_casual;
171
           run;
NOTE: Input data set is already sorted, no sorting done.
NOTE: PROCEDURE SORT used (Total process time):
      real time
                          0.00 seconds
                          0.00 seconds
      user cpu time
      system cpu time
                          0.00 seconds
                          1886.25k
      memory
      OS Memory
                          37028.00k
      Timestamp
                          05/06/2022 09:05:40 AM
      Step Count
                                         61 Switch Count 0
      Page Faults
                                         0
      Page Reclaims
                                         242
                                         0
      Page Swaps
      Voluntary Context Switches
                                         0
      Involuntary Context Switches
                                         0
      Block Input Operations
                                         0
      Block Output Operations
                                         0
172
173
           proc freq data=work.file order=freq;
174
           tables start_station_name / out=Members plots=freqplot(twoway=stacked
175
           orient=horizontal );
           by member_casual;
176
           where (member_casual='member');
177
178
           run;
NOTE: There were 32789 observations read from the data set WORK.FILE.
      WHERE member casual='member';
NOTE: The data set WORK.MEMBERS has 78 observations and 4 variables.
NOTE: PROCEDURE FREQ used (Total process time):
                          0.18 seconds
      real time
      user cpu time
                          0.11 seconds
                          0.02 seconds
      system cpu time
                          4561.71k
      memory
      OS Memory
                          38964.00k
                          05/06/2022 09:05:40 AM
      Timestamp
      Step Count
                                         62 Switch Count 13
      Page Faults
                                         a
      Page Reclaims
                                         693
      Page Swaps
                                         0
      Voluntary Context Switches
                                        432
      Involuntary Context Switches
                                         0
      Block Input Operations
                                         a
      Block Output Operations
                                         1056
179
180
181
182
183
184
           OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
194
```