```
1          OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
70
71         /* STAT 382 WORKSHEET 6 */
72
73
74         /* IMPORT DATASET */
75         TITLE 'IMPORT DATASET';
76
77         %web_drop_table(WORK.IMPORT);
78
79
80         FILENAME REFFILE '/home/u61397358/sasuser.v94/stocks_nyse2.csv';
81
82         PROC IMPORT DATAFILE=REFFILE
83         DBMS=CSV
84         OUT=NYSE2;
85         GETNAMES=YES;
86         RUN;
```

NOTE: Import cancelled. Output dataset WORK.NYSE2 already exists. Specify REPLACE option to overwrite it.
NOTE: The SAS System stopped processing this step because of errors.
NOTE: PROCEDURE IMPORT used (Total process time):
      real time   0.00 seconds
      user cpu time   0.00 seconds
      system cpu time   0.00 seconds
      memory   193.25k
      OS Memory   34984.00k
      Timestamp   05/02/2022 04:52:27 AM
      Step Count   76 Switch Count 0
      Page Faults   0
      Page Reclaims   14
      Page Swaps   0
      Voluntary Context Switches   0
      Involuntary Context Switches   0
      Block Input Operations   0
      Block Output Operations   0

```
87
```

```
88         PROC CONTENTS DATA=NYSE2; RUN;
```

NOTE: PROCEDURE CONTENTS used (Total process time):
      real time   0.06 seconds
      user cpu time   0.06 seconds
      system cpu time   0.01 seconds
      memory   3005.09k
      OS Memory   35760.00k
      Timestamp   05/02/2022 04:52:27 AM
      Step Count   77 Switch Count 0
      Page Faults   0
      Page Reclaims   162
      Page Swaps   0
      Voluntary Context Switches   2
      Involuntary Context Switches   0
      Block Input Operations   0
      Block Output Operations   24

```
89
90
91         %web_open_table(WORK.IMPORT);
92
93
94         /* Task 1: Create a frequency table for the variable Sector */
95         TITLE 'TASK 1: Frequency Table for Sector';
96
97         PROC FREQ DATA=NYSE2;
98         TABLES Sector /
99         PLOTS=(freqplot);
100
101
102
103        /* Task 2: Create a bar chart for the Sector showing how many companies
104        are in each sector with labels. */
105        TITLE 'TASK 2: Bar Chart for Sector';
106
```

NOTE: There were 359 observations read from the data set WORK.NYSE2.
NOTE: PROCEDURE FREQ used (Total process time):

```
        real time              0.19 seconds
        user cpu time          0.10 seconds
        system cpu time        0.01 seconds
        memory                 14156.84k
        OS Memory              46768.00k
        Timestamp              05/02/2022 04:52:27 AM
        Step Count                      78  Switch Count  3
        Page Faults                     0
        Page Reclaims                   3326
        Page Swaps                      0
        Voluntary Context Switches      263
        Involuntary Context Switches    0
        Block Input Operations          0
        Block Output Operations         1112


107        PROC SGPLOTDATA=NYSE2;
108        VBAR Sector;
109        RUN;

NOTE: PROCEDURE SGPLOT used (Total process time):
        real time              0.11 seconds
        user cpu time          0.05 seconds
        system cpu time        0.01 seconds
        memory                 1625.96k
        OS Memory              48180.00k
        Timestamp              05/02/2022 04:52:27 AM
        Step Count                      79  Switch Count  2
        Page Faults                     0
        Page Reclaims                   564
        Page Swaps                      0
        Voluntary Context Switches      223
        Involuntary Context Switches    0
        Block Input Operations          0
        Block Output Operations         448

NOTE: There were 359 observations read from the data set WORK.NYSE2.

110
111
112        /* Task 3: Compute the mean and median DividendYield by sector
113        using one procedure statement. */
114        TITLE 'TASK 3: Mean and Median DividendYield by Sector';
115
116        PROC SGPLOTDATA=NYSE2;
117        VBAR Sector /
118        stat=mean /
                            _
                            22
                            200
ERROR 22-322: Syntax error, expecting one of the following: ;, ALPHA, ATTRID, BARWIDTH, BASELINE, BASELINEATTRS, CATEGORYORDER,
          CLUSTERWIDTH, COLORMODEL, COLORRESPONSE, COLORSTAT, DATALABEL, DATALABELATTRS, DATALABELFITPOLICY, DATALABELPOS,
          DATASKIN, DISCRETEOFFSET, DISPLAYBASELINE, FILL, FILLATTRS, FILLENDCOLOR, FILLPATTERN, FILLPATTERNATTRS, FILLTYPE,
          FREQ, GROUP, GROUPDISPLAY, GROUPORDER, LEGENDLABEL, LIMITATTRS, LIMITCAPSCALE, LIMITS, LIMITSTAT, MISSING, NAME,
          NOFILL, NOOUTLINE, NOSTATLABEL, NOZEROBARS, NUMSTD, OUTLINE, OUTLINEATTRS, RATTRID, RESPONSE, SEGLABEL,
          SEGLABELATTRS, SEGLABELFITPOLICY, SEGLABELFORMAT, SPLITCHAR, SPLITCHARNODROP, STAT, STATLABEL, TIP, TIPFORMAT,
          TIPLABEL, TRANSPARENCY, URL, WEIGHT, X2AXIS, Y2AXIS.
ERROR 200-322: The symbol is not recognized and will be ignored.
119        stat=median;
120        RUN;

NOTE: The SAS System stopped processing this step because of errors.
NOTE: PROCEDURE SGPLOT used (Total process time):
        real time              0.00 seconds
        user cpu time          0.00 seconds
        system cpu time        0.00 seconds
        memory                 500.25k
        OS Memory              47276.00k
        Timestamp              05/02/2022 04:52:27 AM
        Step Count                      80  Switch Count  0
        Page Faults                     0
        Page Reclaims                   51
        Page Swaps                      0
        Voluntary Context Switches      0
        Involuntary Context Switches    0
        Block Input Operations          0
        Block Output Operations         8


121
122
123
124        /* Task 4: Create a histogram for Price with labels. */
```

```
125         TITLE 'TASK 4: Histogram for Price';
126


127         PROC SGPLOT DATA=NYSE2;
128         HISTOGRAM Price;
129         RUN;

NOTE: PROCEDURE SGPLOT used (Total process time):
      real time            0.11 seconds
      user cpu time        0.04 seconds
      system cpu time      0.01 seconds
      memory               2395.34k
      OS Memory            48180.00k
      Timestamp            05/02/2022 04:52:27 AM
      Step Count                     81  Switch Count  1
      Page Faults                    0
      Page Reclaims                  342
      Page Swaps                     0
      Voluntary Context Switches     187
      Involuntary Context Switches   3
      Block Input Operations         0
      Block Output Operations        456

NOTE: There were 359 observations read from the data set WORK.NYSE2.

130
131
132
133         /* Task 5: Create a boxplot for Price with labels. */
134         TITLE 'TASK 5: Boxplot for Price';
135
136         PROC SGPLOT DATA=NYSE2;
137         HBOX Price;
138         RUN;

NOTE: PROCEDURE SGPLOT used (Total process time):
      real time            0.11 seconds
      user cpu time        0.05 seconds
      system cpu time      0.00 seconds
      memory               2418.31k
      OS Memory            48180.00k
      Timestamp            05/02/2022 04:52:28 AM
      Step Count                     82  Switch Count  1
      Page Faults                    0
      Page Reclaims                  304
      Page Swaps                     0
      Voluntary Context Switches     284
      Involuntary Context Switches   0
      Block Input Operations         0
      Block Output Operations        472

NOTE: There were 359 observations read from the data set WORK.NYSE2.

139
140
141         /* Task 6: Compute a 92% Confidence Interval for EarningsperShare */
142         TITLE 'TASK 6: 92% CI for Earnings Per Share';
143
144         PROC UNIVARIATE DATA = NYSE2
145         CIBASIC (ALPHA = 0.08 TYPE = TWOSIDED);
146         VAR EarningsperShare;
147         RUN;

NOTE: PROCEDURE UNIVARIATE used (Total process time):
      real time            0.06 seconds
      user cpu time        0.07 seconds
      system cpu time      0.00 seconds
      memory               1069.50k
      OS Memory            47276.00k
      Timestamp            05/02/2022 04:52:28 AM
      Step Count                     83  Switch Count  0
      Page Faults                    0
      Page Reclaims                  75
      Page Swaps                     0
      Voluntary Context Switches     0
      Involuntary Context Switches   0
      Block Input Operations         0
      Block Output Operations        24


148         /* The 92% CI is: (3.31449,4.35894) */
```

```
149
150
151
152          /* Task 7: Test the claim that the mean DividendYield is
153          greater than 2 at a 3.5% significance level. */
154          TITLE 'TASK 7: DividendYield HT';
155
156          /* Hypotheses:
157          H0: mu = 2
158          H1: mu > 2
159          */
160
161
162          * Code;
163          proc ttest data=NYSE2 h0=2 sides=u plots;
164          var DividendYield;
165          run;

NOTE: PROCEDURE TTEST used (Total process time):
      real time              0.45 seconds
      user cpu time          0.18 seconds
      system cpu time        0.04 seconds
      memory                 11134.31k
      OS Memory              55764.00k
      Timestamp              05/02/2022 04:52:28 AM
      Step Count                      84  Switch Count  24
      Page Faults                     0
      Page Reclaims                   13891
      Page Swaps                      0
      Voluntary Context Switches      767
      Involuntary Context Switches    1
      Block Input Operations          0
      Block Output Operations         1408


166
167
168          /*
169          P-value = 0.0125
170          Decision: Reject H0
171          Conclusion: There is enough evidence to suggest that the mean Dividend Yield is greater than 2.
172          */
173
174          OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
185
```