```
1          OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
NOTE: ODS statements in the SAS Studio environment may disable some output features.
69
70         /*********************************************************************************/
71         /* Program Name: STAT 604 HW#8   */
72         /* Date Created: 10/10/2021   */
73         /* Author: Jack Rodoni   */
74         /* Purpose: STAT 604 HW#8   */
75         /* Date Modified: 10/14/2021    */
76         /* Location: /home/u59649056/JRodoni_Homework08.sas   */
77         /*********************************************************************************/
78
79         /* 1.) Housekeeping to clear any titles and footnotes and to turn off the printing of procedure titles*/
80
81         TITLE;
82         FOOTNOTE;
83         ods noproctitle;
84
85         /* 2.) Create a library referenceto the location of the sample (cert) data that wasdownloaded and extracted from*/
86         /*     SAS.  Add the option access=readonlybetween the path and the semicolon in your libname statement to makes*/
87         /*     sure you do not accidentally overwrite files in this library.  Create a second library reference to the  */
88         /*     np_info.xlsxfile. */
89
90         libname datacert "/home/u59649056/my_shared_file_links/fkincheloe/stat604/cert" access=readonly;
NOTE: Libref DATACERT was successfully assigned as follows:
      Engine:        V9
      Physical Name: /home/u59649056/my_shared_file_links/fkincheloe/stat604/cert
91         libname npcert XLSX "/home/u59649056/Homeworks/np_info.xlsx";
NOTE: Libref NPCERT was successfully assigned as follows:
      Engine:        XLSX
      Physical Name: /home/u59649056/Homeworks/np_info.xlsx
92
93
94         /* 3.) Write a PROC step that will list all of the data sets in the first library created above (sample course data) */
95         /*     without reporting the descriptor portion of each data set.  Give this output an appropriate title.Include a   */
96         /*     footnote that says, “Downloaded from SAS Website”
96       ! */
97
98         FOOTNOTE "Downloaded from SAS Website";
99         proc contents DATA=datacert._ALL_ NODS;
100        run;

NOTE: PROCEDURE CONTENTS used (Total process time):
      real time           0.08 seconds
      user cpu time       0.07 seconds
      system cpu time     0.00 seconds
      memory              1502.75k
      OS Memory           27508.00k
      Timestamp           10/13/2021 08:48:09 PM
      Step Count                        181  Switch Count  0
      Page Faults                       0
      Page Reclaims                     168
      Page Swaps                        0
      Voluntary Context Switches        72
      Involuntary Context Switches      0
      Block Input Operations            0
      Block Output Operations           32


101
102        /* 4.) Write a PROC step that will report the descriptor portion of the mechanicsdata set in the sample data library.
102      ! */
103        /*     Use “Mechanics Data Set” as the first title line and “Descriptor Portion” as the second title directly
103      ! below it. */
104        /*     The report must list the variables in the order they were created.There will be no footnote on this report.*/
105
106        TITLE1 "Mechanics Data Set";
107        TITLE2 "Descriptor Portion";
108        proc contents DATA=datacert.mechanics varnum;
109        run;

NOTE: PROCEDURE CONTENTS used (Total process time):
      real time           0.04 seconds
      user cpu time       0.04 seconds
      system cpu time     0.00 seconds
      memory              1142.93k
      OS Memory           28024.00k
      Timestamp           10/13/2021 08:48:09 PM
      Step Count                        182  Switch Count  0
```

```
      Page Faults                      0
      Page Reclaims                    172
      Page Swaps                       0
      Voluntary Context Switches       3
      Involuntary Context Switches     0
      Block Input Operations           0
      Block Output Operations          24


110
111       /* 5.) Write a PROC step that will report the data portion of the mechanicsdata set.The output musthave the same first
111     ! title */
112       /*     line as above and there will be a blank line between it and the second title, “Data Portion”.In all steps of
112     ! this     */
113       /*     assignment, use the minimum number of title statements required. */
114
115       TITLE1 "Mechanics Data Set";
116       TITLE3 "Data Portion";
117       proc print DATA=datacert.mechanics;
118       run;

NOTE: There were 29 observations read from the data set DATACERT.MECHANICS.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.07 seconds
      user cpu time       0.07 seconds
      system cpu time     0.00 seconds
      memory              705.37k
      OS Memory           27764.00k
      Timestamp           10/13/2021 08:48:09 PM
      Step Count                       183  Switch Count  0
      Page Faults                      0
      Page Reclaims                    90
      Page Swaps                       0
      Voluntary Context Switches       2
      Involuntary Context Switches     0
      Block Input Operations           0
      Block Output Operations          32


119
120       /* 6.) Write a PROC step that will report the descriptor portion of the zipcodedata set in the sashelp library.  The
120     ! report must */
121       /*     list the variables in the order they were created.  Supply an appropriate title.  Include a footnote that says,
121     ! “Included */
122       /*     with SAS Installation”.   */
123
124       Title1 "Zip Code Data";
125       Title2 "Descriptor Portion";
126       Footnote "Included with SAS Installation";
127       proc contents DATA=sashelp.zipcode varnum;
128       run;

NOTE: PROCEDURE CONTENTS used (Total process time):
      real time           0.06 seconds
      user cpu time       0.07 seconds
      system cpu time     0.00 seconds
      memory              1740.34k
      OS Memory           28344.00k
      Timestamp           10/13/2021 08:48:09 PM
      Step Count                       184  Switch Count  0
      Page Faults                      0
      Page Reclaims                    195
      Page Swaps                       0
      Voluntary Context Switches       0
      Involuntary Context Switches     0
      Block Input Operations           0
      Block Output Operations          24


129
130       /* 7.) Write a PROC step that will list all of the tables in the Excel file without reporting the descriptor portion of
130     ! each table.*/
131       /*     Give this output an appropriate title.  There will be no footnote on this report.   */
132
133       TITLE "Table Contents";
134       proc contents DATA=npcert._ALL_ NODS;
135       run;

NOTE: PROCEDURE CONTENTS used (Total process time):
      real time           0.02 seconds
      user cpu time       0.02 seconds
```

```
      system cpu time     0.00 seconds
      memory              2734.78k
      OS Memory           29812.00k
      Timestamp           10/13/2021 08:48:09 PM
      Step Count                        185  Switch Count  0
      Page Faults                       0
      Page Reclaims                     545
      Page Swaps                        0
      Voluntary Context Switches        6
      Involuntary Context Switches      0
      Block Input Operations            0
      Block Output Operations           32


136
137         /* 8.) Write a PROC step that will report the descriptor portion of the parksworksheet from the Excel file.  Use
137       ! “National Parks      */
138         /*     Information” as the only title for this and the procedure in the next step.  The report must list the variables
138       ! in alphabetical*/
139         /*     order.  */
140
141         TITLE "National Parks Information";
142         proc contents DATA=npcert.parks;
143         run;

NOTE: PROCEDURE CONTENTS used (Total process time):
      real time           0.52 seconds
      user cpu time       0.51 seconds
      system cpu time     0.02 seconds
      memory              40807.75k
      OS Memory           72884.00k
      Timestamp           10/13/2021 08:48:10 PM
      Step Count                        186  Switch Count  0
      Page Faults                       0
      Page Reclaims                     10329
      Page Swaps                        0
      Voluntary Context Switches        2
      Involuntary Context Switches      1
      Block Input Operations            0
      Block Output Operations           8


144
145         /* 9.) Write a PROC step that will report the data portion of the parks. */
146         TITLE "National Parks Information";
147         proc print DATA=npcert.parks;
148         run;

NOTE: Access by observation number not available. Observation numbers will be counted by PROC PRINT.
NOTE: The import data set has 56 observations and 6 variables.
NOTE: The import data set has 56 observations and 6 variables.
NOTE: There were 56 observations read from the data set NPCERT.parks.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.57 seconds
      user cpu time       0.55 seconds
      system cpu time     0.03 seconds
      memory              40559.18k
      OS Memory           72624.00k
      Timestamp           10/13/2021 08:48:10 PM
      Step Count                        187  Switch Count  0
      Page Faults                       0
      Page Reclaims                     10028
      Page Swaps                        0
      Voluntary Context Switches        2
      Involuntary Context Switches      0
      Block Input Operations            0
      Block Output Operations           32


149
150
151         /* 10.) Include a statement to release the library reference connection to the Excel file. */
152         libname npcert clear;
NOTE: Libref NPCERT has been deassigned.
153         run;
154
155         /* 13.) Use the report information contained in your ODS PDF output documents to answer the questions below and include
155       ! the answers in
156         /*      the comment section at the bottom of your program file:
157         /*      (a) How many tables are in the Excel file?
158         /*          3
```

```
159         /*      (b) What is the observation length of the mechanics data set?
160         /*          88
161         /*      (c) How many numeric variables are in the mechanics data set?
162         /*          4
163         /*      (d) What is the name and length of the longest variable in the Parks table?
164         /*          Park Name - 46 obs
165         /*      (e) What is the value of the state variable for Death Valley National Park?
166         /*          CA,NV
167         /*      (f) Which of the data sets are sorted according to the descriptor portion reports?
168         /*      Mechanics, Zipcode and Parks
169         /*      (g) How many indexes does the zipcode data set have?
170         /*    3
171
172
173
174
175
176
177
178
179
180
181
182         OPTIONS NONOTES NOSTIMER NOSOURCE NOSYNTAXCHECK;
183         ODS HTML CLOSE;
184         &GRAPHTERM; ;*';*";*/;RUN;QUIT;
185         QUIT;RUN;
186         ODS HTML5 (ID=WEB) CLOSE;
187
188         FILENAME _GSFNAME;
NOTE: Fileref _GSFNAME has been deassigned.
189         DATA _NULL_;
190         RUN;

NOTE: DATA statement used (Total process time):
      real time           0.00 seconds
      user cpu time       0.00 seconds
      system cpu time     0.00 seconds
      memory              460.84k
      OS Memory           25976.00k
      Timestamp           10/13/2021 08:48:10 PM
      Step Count                        188  Switch Count  0
      Page Faults                       0
      Page Reclaims                     25
      Page Swaps                        0
      Voluntary Context Switches        0
      Involuntary Context Switches      0
      Block Input Operations            0
      Block Output Operations           0


191         OPTIONS NOTES STIMER SOURCE SYNTAXCHECK;
192
```