```
56   /***Your Name Ji Shen
57       Date 1/21/2015
58       ST 555
59       Homework number 3
60       Goal:
61       To apply concepts from the chapters to a set of problems
62       ***/
63
64   libname orion "D:\google drive\NC semester 6\st555\data";
NOTE: Libref ORION was successfully assigned as follows:
      Engine:        V9
      Physical Name: D:\google drive\NC semester 6\st555\data
64 !                                                          *create orion libarary;
65   libname HW "D:\google drive\NC semester 6\st555\HW3";
NOTE: Libref HW was successfully assigned as follows:
      Engine:        V9
      Physical Name: D:\google drive\NC semester 6\st555\HW3
65 !                                                        *create HW libarary;
66
67   /* Question 1 */
68   /* part b */
69
70   proc print data=HW.ffprez noobs; *print out all the data;
NOTE: Writing HTML Body file: sashtml3.htm
71   run;

NOTE: There were 287 observations read from the data set HW.FFPREZ.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           1.32 seconds
      cpu time            1.07 seconds



72
73
74   /* part c */
75   proc print data=HW.ffprez noobs;
76   where gender='Female';  *print out all the observation of female respondents;
77   run;

NOTE: There were 144 observations read from the data set HW.FFPREZ.
      WHERE gender='Female';
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.14 seconds
      cpu time            0.06 seconds



78
79
80   /* part d */
81   proc print data=HW.ffprez noobs;
82   where gender='Male'and resp_party = 'Republican';  *print out all the observation of Male
                ------
                49
82 ! republican respondents;
NOTE 49-169: The meaning of an identifier after a quoted string might change in a future SAS
             release.  Inserting white space between a quoted string and the succeeding identifier
```

```
            is recommended.
83   run;

NOTE: There were 26 observations read from the data set HW.FFPREZ.
      WHERE (gender='Male') and (resp_party='Republican');
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.07 seconds
      cpu time            0.03 seconds



84
85   /* part e */
86   proc print data=HW.ffprez noobs;
87   where resp_party in('Democrat', 'Republican') and
88   year >2032;  *print out all the observation from respondents of either democrat
89   or republican, and do not think a woman will be president until after 2032 ;
90   run;

NOTE: There were 14 observations read from the data set HW.FFPREZ.
      WHERE resp_party in ('Democrat', 'Republican') and (year>2032);
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.07 seconds
      cpu time            0.03 seconds



91
92   /* part f */
93   proc print data=HW.ffprez noobs;
94   where year=.;  *print out all the observation which year is missing value;
95   run;

NOTE: There were 23 observations read from the data set HW.FFPREZ.
      WHERE year=.;
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.09 seconds
      cpu time            0.04 seconds



96
97   /*Question 2 */
98
99   /* part a*/
100  Data Sales; * correct dta to data;
101  set orion.Sales;
102  where Country='US' AND Salary <= 26000;  * variable name corrected as salary missing semicolon
102! ;
103  RUN;

NOTE: There were 13 observations read from the data set ORION.SALES.
      WHERE (Country='US') and (Salary<=26000);
NOTE: The data set WORK.SALES has 13 observations and 9 variables.
NOTE: DATA statement used (Total process time):
      real time           0.03 seconds
      cpu time            0.03 seconds
```

```
104  PROC PRINT data=Sales; * data name corrected from salse to sales;
105  RUN;

NOTE: There were 13 observations read from the data set WORK.SALES.
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.07 seconds
      cpu time            0.01 seconds



106
107  /*part b*/
108
109  PROC PRINT data=Sales;
110  format hire_date year.; * set the format of date into year;
111  id Employee_id;  * use employee_id as indentifier;
112  where hire_date>=1998; * select employees hired after Jan,1998;
113  RUN;

NOTE: There were 13 observations read from the data set WORK.SALES.
      WHERE hire_date>=1998;
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.14 seconds
      cpu time            0.04 seconds



114
115  /*Question 3*/
116
117  /*part a*/
118  proc sort data = orion.employee_payroll  out = salary;
119  by employee_gender decending salary; * sort the data by Employee_Gender, and within gender by
119! Salary in descending order;
120  run;

NOTE: There were 424 observations read from the data set ORION.EMPLOYEE_PAYROLL.
NOTE: The data set WORK.SALARY has 424 observations and 8 variables.
NOTE: PROCEDURE SORT used (Total process time):
      real time           0.01 seconds
      cpu time            0.01 seconds



121
122  /*part b*/
123  proc print data = salary noobs;
124  var employee_id salary marital_status; *display only the variables Employee_ID, Salary, and
124! Marital_Status;
125  where employee_term_date ~= . and salary>50000; *only for former employees earn more than
125! 50000 salary;
126  sum salary; * include a total and subtotals for Salary;
127  by employee_gender;
128  run;

NOTE: There were 9 observations read from the data set WORK.SALARY.
      WHERE (employee_term_date not = .) and (salary>50000);
NOTE: PROCEDURE PRINT used (Total process time):
      real time           0.06 seconds
```

```
      cpu time           0.01 seconds


129
130
131  /*Question 4*/
132
133  ods trace on;
134  ods select ExtremeObs;  * select the output only with ExtremeObs;
135  proc univariate data = orion.shoes_tracker;
136  var product_id;   *select only the variable product_id;
137  run;


Output Added:
-------------
Name:       ExtremeObs
Label:      Extreme Observations
Template:   base.univariate.ExtObs
Path:       Univariate.Product_ID.ExtremeObs
-------------
NOTE: PROCEDURE UNIVARIATE used (Total process time):
      real time          0.06 seconds
      cpu time           0.01 seconds


138  ods trace off;
```