STAT 425 and STAT 625- Statistical Software

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Homework #3-SOLUTIONS

Part I

1. Creating a SAS Data Set

```
data work.assistant;
   set orion.staff;
   where Job_Title contains 'Assistant' and
         Salary<26000;
   Increase=Salary*.10;
   New_Salary=Salary+Increase;
run;

proc print data=work.assistant;
   id Employee_ID;
   var Job_Title Salary Increase New_Salary;
   format Salary Increase New_Salary dollar10.2;
run;
```

2. Subsetting Observations Based on Three Conditions

```
data work.delays;
   set orion.orders;
   where Order_Date+4<Delivery_Date
         and Employee_ID=99999999;
   Order_Month=month(Order_Date);
   if Order_Month=8;
   label Order_Date='Date Ordered';
         Delivery_Date='Date Delivered'
         Order_Month='Month Ordered';
         format Order_Date Delivery_Date mmddyy10.;
   keep Employee_ID Customer_ID Order_Date Delivery_Date
        Order_Month;
run;

proc contents data=work.delays;
run;

proc print data=work.delays;
run;
```

Part II

3. Accessing an Excel Worksheet

```
options validvarname=v7;
*libname prod excel "&path\products.xlsx";
*libname prod pcfiles path="&path\products.xlsx";

proc contents data=prod._all_;
run;

data work.golf;
   set prod.'sports$'n;
   where Category='Golf';
```

Part III

Supplemental exercise for STAT 625 and Honors credit

4. Using the SOUNDS-LIKE Operator to Select Observations

```
data work.tony;
   set orion.customer_dim;
   where Customer_FirstName=* 'Tony';
run;

proc print data=work.tony;
   var Customer_FirstName Customer_LastName;
run;
```

5. Using an IF-THEN/DELETE Statement to Subset Observations

```
data work.bigdonations;
   set orion.employee_donations;
   Total=sum(Qtr1,Qtr2,Qtr3,Qtr4);
   NumQtrs=n(Qtr1,Qtr2,Qtr3,Qtr4);
   if Total<50 or NumQtrs<4 then delete;
   label Qtr1='First Quarter'
         Qtr2='Second Quarter'
         Qtr3='Third Quarter'
         Qtr4='Fourth Quarter';
   drop Recipients Paid_By;
run;

proc contents data=work.bigdonations;
run;

proc print data=work.bigdonations label noobs;
run;
```

```
   drop Category;
   label Name='Golf Products';
run;

libname prod clear;
proc print data=work.golf label;
run;
```

```
/* Alternate solution */

options validvarname=v7;
libname prod xlsx "&path\products.xlsx";

proc contents data=prod._all_;
run;

data work.golf;
   set prod.sports;
   where Category='Golf';
   drop Category;
   label Name='Golf Products';
run;

libname prod clear;

proc print data=work.golf label;
run;
```