Homework 2 (Due at 6:40pm, Sep 20th)

Problem 1.

Download the tennis dataset from sakai.

Save this file to your home drive.

1) Read this data file in SAS by using INFILE statement. Call this dataset tennis. Print it out.
2) Create a new dataset called tennis1 by keeping the following variables: name, matches, wins, losses and male. Print it out.
3) Create a new dataset called tennis2 by adding two variables to tennis1: pct and tour, such that pct=wins/matches, tour = ATP if male=1, tour =WTA if male=0. Print it out.
4) Create a new dataset called tennis3 by sorting dataset tennis2 by variable pct descending order. Print it out.
5) Split dataset tennis3 into two new datasets called atpdata with male =1 and wtadata with male=0. Print in out.
6) Write name and pct of atpdata to an external file called 'atp_rankings.txt'. Print this file out.

NOTE: 'Print it out' means using PROC PRINT data=…; to print the dataset. Hand in all your codes from 1) to 6) and outputs from 2) to 6).

Problem 2.

Create two datasets by the following code:

```
DATA One;
INPUT ID age name $;
DATALINES;
1001 21 Jone
1002 20 Peter
1003 22 Mary
1004 19 Joe
1005 21 Mark
1006 23 Sue
1007 19 Harry
1008 18 Tom
1009 22 Andy
1020 21 Larry
;
RUN;
PROC PRINT DATA=One;
RUN;

DATA Two;
INPUT ID gender $ department $;
DATALINES;
1006 F Econ
```

```
1007 M Econ
1008 M Math
1009 M Stat
1010 M Stat
1001 M Econ
1002 M Stat
1003 F Econ
1004 F Econ
1005 M Fina
;
RUN;
PROC PRINT DATA=Two;
RUN;
```

We learned four kinds of combination. Now let us combine the above data sets. In the following step, please do not create the data sets again. Just use them.

1) Which of them do not require a sorting procedure before the combination? Do these kinds of combination.

2) Which of them do require a sorting procedure before the combination? Do these kinds of combination.

3) Do one of the combinations in 1) again. Compare the result with that in 1). Report and explain your findings.

Answer the questions and also submit your code and output for each of the questions.

Readings.

Learning SAS in the Computer Lab: Module 3, 4.