STA502 NAME: Lina Lee

/\*header: Exercise Number 1

Author: Lina Lee

Purpose: read the CSV dataset into SAS as a SAS dataset creates a new SAS data set for which each observation consists of the mean, median and standard deviation of the absolute

values of all numeric variables, and PROC PRINT to show the 3567-3570's observations of the re-sulting dataset from a new SAS data set

input: data\_set\_ALL\_AML\_independent.csv

\*/

**/\*EX1 (a) read the dataset into SAS as a SAS dataset\*/**

proc import

datafile="C:\Users\linal\Desktop\2018\STA502\HW4\data\_set\_ALL\_AML\_independent.csv"

out=work.allaml

;

**/\*EX1-(b) creates a new SAS data set for which each observation consists of the mean, median and standard deviation of the absolute values of all numeric variables\*/**

data absolute;

set allaml;

array myarray \_numeric\_;

do over myarray;

if myarray<0 then myarray=abs(myarray);

end;

run;

data statistics;

set absolute;

array myarray{\*} \_numeric\_;

mean1=mean(of myarray[\*]);

median1=median(of myarray[\*]);

stv1=std(of myarray[\*]);

keep mean1 median1 stv1;

run;

ods rtf file="C:\Users\linal\Desktop\2018\STA502\HW4\results1-1" bodytitle style=journal;

**/\*EX1-(c) PROC PRINT to show the 3567-3570's observations of the re-**

**sulting dataset from (a)\*/**

proc print data=statistics (firstobs=3567 obs=3570);

title "the 3567-3570's observations";

run;

ods rtf close;

ods rtf file="C:\Users\linal\Desktop\2018\STA502\HW4\results2" bodytitle style=journal;

**/\*header: Exercise Number 2**

**Author: Lina Lee**

**Purpose: Calculate the diving score for each of the observations, create a**

**new variable containing this calculated score. create a .txt file containing all**

**the observations from the updated SAS dataset.**

**input Diving.sas7bdat**

**input variable:**

**\*/**

%let data\_folder=C:\Users\linal\Desktop\2018\STA502\HW4;

**/\* EX2-(a) From the scores provided by the seven judges, cross out the two highest and the two lowest scores. Then add the rest of the scores together. Multiply your last sum by the degree of difficulty to get the final score for this dive \*/**

data divingcal;

set tmp1.diving;

small1=smallest(1, of J1-J7) ;

small2=smallest(2, of J1-J7) ;

large1=largest(1, of J1-J7);

large2=largest(2, of J1-J7);

sumjudge=J1+J2+J3+J4+J5+J6+J7-small1-small2-large1-large2;

finalscore=sumjudge\*DD;

run;

**/\* EX2-(b) create a .txt file containing all the observations from the updated SAS dataset \*/**

data \_null\_;

set divingcal;

file "&data\_folder\divingoutput.txt";

put @1 name @30 country @60 height 4.2 @65 weight @67 dive @69 finalscore 4.2;

run;

ods rtf close;

**/\*EX1-(c) PROC PRINT to show the 3567-3570's observations of the re-**

**sulting dataset from (a)\*/**

***the 3567-3570's observations***

| *Obs* | *mean1* | *median1* | *stv1* |
| --- | --- | --- | --- |
| *3567* | 436.088 | 446.0 | 160.865 |
| *3568* | 40.941 | 21.5 | 56.812 |
| *3569* | 166.559 | 127.5 | 124.076 |
| *3570* | 211.559 | 198.0 | 114.620 |

**/\*EX2-(b) a screen-shot of the first 18 observations from this dataset is below\*/**

