Anthony Cunningham

STAT 2010

9/22/2016

**Homework 4 SAS Code**

1. Data Step for reading winehrt.dat data file

**data** winehrt;

input country$ wineConsumption heartAttacks;

datalines;

Australia 2.5 211

Austria 3.9 167

.

.

WestGerm 2.7 172

;

**run**;

1a. Code to produce scatterplot

**proc** **plot** data=winehrt;

plot heartAttacks\*wineConsumption;

**run**;

1d. Code to produce correlation coefficient *r*

**proc** **corr** data=winehrt;

var heartAttacks wineConsumption;

**run**;

2. Data Step for reading stocks.dat data file

**data** stocks;

input year overseasReturn usReturn;

datalines;

1971 29.6 14.6

1972 36.3 18.9

.

.

1997 2.1 33.4

;

**run**;

2a. Code to produce scatter plot

**proc** **plot** data=stocks;

plot overseasReturn\*usReturn;

**run**;

2b. Code to find correlation coefficient *r*

**proc** **corr** data=stocks;

var overseasReturn usReturn;

**run**;

2c. Code to find 5-number summaries and box plots

**proc** **univariate** plot data=stocks;

var overseasReturn;

**run**;

**proc** **univariate** plot data=stocks;

var usReturn;

**run**;

2e/f/g. Code to find least squares regression equation/produce scatterplot with regression line superimposed/produce residual plot

**proc** **reg** data=stocks;

model overseasReturn=usReturn/p;

**run**;