

Software Homework 8 & 9

MTH 145 – Spring 2016

Due Wednesday, 11 May, at 2:29pm

Objective:

The goal of this assignment is to demonstrate your ability to use statistical software to conduct ANOVA and Regression.

Dataset:

The file `sleep` contains data that were obtained from a sample of students who did skills tests to measure cognitive function, completed a survey that asked many questions about attitudes and habits, and kept a sleep diary to record time and quality of sleep over a two week period. It has a total of 253 observations with each observation have values for 12 variables. These variables are listed below.

- `AlcoholUse`: Self-reported (0: Abstain, 1: Light, 2: Moderate, or 3: Heavy)
- `AnxietyScore`: Measure of amount of anxiety
- `AverageSleep`: Average hours of sleep for all days
- `ClassesMissed`: Number of classes missed in a semester
- `CognitionZscore`: Z-score on a test of cognitive skills
- `DASscore`: Combined score for depression, anxiety and stress
- `DepressionScore`: Measure of degree of depression
- `GPA`: Grade point average (0 – 4 scale)
- `Happiness`: Measure of degree of happiness
- `LarkOwl`: Early riser or night owl? (1: Lark, 2: Owl, or 3: Neither)
- `PoorSleepQuality`: Measure of sleep quality (higher values are poorer sleep)
- `StressScore`: Measure of amount of stress