**CS 299 Lab #2 (20 points)**

**Submission instruction: (***Submit problem 1 only.)*Upload source code (\*.py file) AND a script file containing test runs to blackboard under Lab2 link.

1. In Lab 1 we calculated BMI (a sample program bmi.py as attached). A BMI scale table is given below. Please modify your Lab 1’s BMI calculation code to provide user some feedback based on the calculated BMI with regards to the information given in the BMI scale table. Provide test runs of various scenarios (i.e. normal BMI, overweight, obese, extreme obesity). Note: your program should calculate BMI in either metric system or English system.

BMI scale table (simplified version)

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| BMI | <=24 | 25-29 | 30-39 | >40 |
| Status | normal | overweight | obese | Extreme obesity |

1. Write a program to play a “rock, paper, scissors” game. Rules are: The paper covers rock, the rock breaks the scissors, and the scissors cut the paper. You enter your guess, and the computer makes random choice, and the program should declare a winner or draw/tie. Perform at least three sets of testing.

To generate a random number in range p[0, 2], use the following:

***import random***

***choice = int (random.random() \* 100) % 3***

(in Python you actually can randomly generate “rock”, “paper”, or “scissors” – see Lecture 4 random number generator)

# Making transcripts: the script command

1) Turn on scripting. The following command will cause Linux to make a file copy of what appears on the screen.

**$ script mywork**

Enter a few commands so that your file mywork will contain a transcript of your keystrokes. Try something like:

**$ ls**

**$ cat animals.txt**

1. Now exit scripting.

**$ exit**

3) Check out its contents.

**$ more mywork**

Note, the script file mywork records two time stamps: the time the file was started and the time the script was done