Vg101. Introduction to Computer and Programming (Fall 2018)

Homework #1

Assigned: 9/18/2018 Due: 9/25/2018

Notes for submission: Please submit ONE Matlab source file to Canvas for the problem. You need to name the file using the format "**sYourID_hw1.m**" in order to speed up our grading process. For example, the file submitted by the student with ID#518370900000 for this homework assignment should be "s518370900000_hw1.m". Also notice that you will be working with a Matlab function below, where the m-file name generally should be the same as the function name. You should stick to this rule during your testing of the codes. However, please remember to rename your file according to the above rule before submitting it to Canvas so that submissions from different people can be differentiated. And we will handle the inconsistency during the grading process.

Homework problem: Write a Matlab function to calculate the body mass index (BMI) with the following function prototype:

function [BMI status] = ComputeBMI(weight_lbs, height_foot, height_inch)

where the input *weight_lbs* is the weight measured in pound, *height_foot* and *height_inch* are the height measured in foot and inch. And the output *BMI* is the calculated BMI according to the inputs, and status should be 1, 2, 3, or 4 indicating the status of "underweight", "normal or healthy weight", "overweight", or "obese". Notice that the output *BMI* should be rounded to have precision to 0.1. For example, for a guy with weight of 125 lbs and height of 5'9'', the output BMI should be 18.5 and the status should be 2 indicating "normal or healthy weight". Please refer to the webpage below for more info on BMI:

https://www.cdc.gov/healthyweight/assessing/bmi/adult_bmi/index.html