

Introduction to Programming – Autumn 2019

Assignment 1: Computing BMI

Submission Deadline: 19th September 2019, ~~9:00 pm~~ 10:00 pm

Problem Statement

Create a BMI calculator application that takes the user's weight in kilograms and height in meters as input, then calculates and displays the user's body mass index, according to the formula:

$$BMI = Weight / (Height \times Height)$$

Also display the category the user falls into, based on the following information:

Category	BMI VALUES
Underweight	≤ 18.5
Normal	> 18.5 and ≤ 25.0
Overweight	> 25.0 and ≤ 30.0
Obese	> 30.0

Input Format

You will have to take two numbers as input from the user: **W** and **H** corresponding to the weight and height of the user. You can assume that the input is as follows:

- $W > 0$
- $H > 0$

Output Format

Print the calculated BMI value and the category the person falls into, separated by a newline (i.e. both should be printed on a separate line).

Sample Test Cases

a)

INPUT 60 1.6
Output 23.4375 Normal

b)

INPUT 90 1.8
Output 27.7777 Overweight

Submission Details:

Please submit the following information:

- **Source Code:** Your source program. The name of your file should be in this format: BMI-<roll no>.c where you replace <roll no> with your roll number.
- **Readme.txt:** In this file, you should explain how to compile and run your program. The name of your file should be in this format: BMI_Readme-<roll no>.txt where you replace <roll no> with your roll number.

Zip both these files and name it as: BMI-<roll no>.zip. Please follow the naming convention strictly. Otherwise, your program will not be evaluated. Then, submit it on google classroom for this assignment by the above mentioned deadline.

Late Submission Penalty:

For each day after the deadline, your submission will be penalized by 10 marks.