# Homework Assignment 1: Variables, Input/Output

|  |  |
| --- | --- |
| Assigned date | 2024-09-06 |
| Due date | 2024-09-13 |
| Estimate required time | 60 minutes |

This is an individual assignment.

* You may consult with professor and TA about any aspect of the assignment.
* You may consult with other students only in a general way, e.g., about debugging or Python issues, or questions about wording on the assignment.
* You cannot actively work with someone unless the assignment specifically grants permission to work together with another student.

Remember to follow the CMPT140/166 Coding Standard.

## Purpose

This assignment gives you opportunities to practice handling variables, getting input from users and generating output.

## Specification

You have been contracted by the Technology Wizard Unit (TWU) at Fake Hospital. A reporting system is needed. In this system, the hospital staff will be entering lab test results for a patient, and a report will need to be printed out so that doctors and nurses can get a quick overview of the patient’s condition.

The reporting system shall ask the following questions:

1. name of patient

2. weight of patient (kg)

3. height of patient (cm)

4. does the patient have POLE mutation? (yes/no)

5. does the patient have MMR deficiency? (yes/no)

6. does the patient have p53 mutation? (yes/no)

(Teaser: these are real clinical questions related to a type of cancer occurring in the endometrium. More background information will be given in assignment 2)

The program shall calculate the patient’s BMI. The Python code to do so is:

bmi = weight / (height/100 \* height/100)

assume …

* weight = weight in kilogram
* height = height in centimeter
* weight and height are Python variables of type **float**

The program shall print the report to the console (i.e. using print() statement). Please generate report in the format as shown in the following example:

A black screen with white text

Description automatically generated

IMPORTANT NOTE: you can assume that the user only enters integers for height and weight values.

## Deliverables

Create one python file named hw1-LastnameFirstname.py (e.g. hw1-LeungSamuel.py) where Lastname and Firstname are student’s last and first name respectively. Please ...

Please submit your source code file hw1-LastnameFirstname.py at <http://learn.twu.ca>

Grading scheme for codes:

* Documentation (20%)
* Correct execution (60%)
* Correct style and structure (20%)

## Hints

Please start early.