

Organize your questions and the solutions to *all five* questions, into a document of a word processor of your choice (MS WORD, Google Doc, LibreOffice, ...), as well as individual python program files for question 3, 4, and 5. Put the following files (with your student ID numbers as the file name prefix).

1103790_110379_hw4.pdf,
1103790_1103799_hw4_q3.py,
1103790_1103799_hw4_q4.py,
1103790_1103799_hw4_q5.py,

into a folder named as 1103799_hw4, compress this folder into 1103790_1103799_hw4.zip, and then upload this file to portal's homework section

Questions with short answers: (You are required to test / demonstrate your answer in the *python console*, get the screen snapshot, and state your answer in sentences)

Question 1) #8,

Question 2) #14,

Questions with code writing: (You are required to write the code in the script window and save the program file. Also, write how the program runs and the corresponding input/output in the document, as well as paste the source code into your document using monospace font such as Consola, Roboto Mono, Menlo,...

Question 3) Ask the user to enter the value of x, and then the program will compute the value of the expression

$$\frac{x^4 + 7x^3 - 3x^2}{5}$$

Execute the program twice. The first run with $x = 2$, and the second run with $x = -2.5$

Question 4) #40(a), (You are not obliged to enter the value of your own weight and height)

Question 5) The user enters the distance travelled (in km) of a motorcycle with full tank of fuel, and volume of the tank (in liter), then the program will compute the fuel mileage rate (L / 100 km), the fuel efficiency (km / L), and mpg (miles / gallon). You are encouraged to search the internet to get the typical values for your program's input.