INTRODUCTION TO MICROCOMPUTERS LAB.

152115025

Homework #4

GNUSim8085 will be used as a simulator during the evaluation of the first four assignments. https://gnusim8085.srid.ca/download

Design a program that will perform two operations given below:

- Use port 00h to get the operation choices.
- If "0" is entered, calculate the highest power (that can be calculated with 8 bits) of the number that you will get via port 01h and use port 02h for passing the computation output (e.g. port 01h = 3 → 3^5 = 243 → port 02h = 5). (40p)
- If "1" is entered, find a number such that its square is closest to the value received via port 01h and use port 02h for passing the number (e.g. port 01h = 65 → $8^2 \approx 65$ → port 02h = 8). If you find two numbers with equal distances, you can also use port 03h to passing the second number. (60p)

Save your completed work in the file named "152120XX10XX_AdSoyad_HwX.asm" and zip it into file of the same name (not .asm.zip!). Upload the zip file to the relevant section on the UZEM.

As indicated in the orientation, make sure that the comments on your work are descriptive, as this will be effective in scoring.