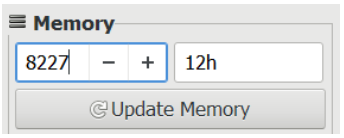
INTRODUCTION TO MICROCOMPUTERS LAB.

152115025

Homework #1
(DATA TRANSFER INSTRUCTIONS)

You will use your student number's last eight digits as the address in this study, such as *"20231000" -> "2023h" & "1000h"*. Calculate values as decimal and add them as a comment (`2023h ;8227`).



Using the "Memory" tool in the interface, set the value stored at address "2023h" to "12h" and "1000h" to "34h". Check the correctness of the modifications after they have been made. Values and addresses on the interface can be both hexadecimal and decimal values. Please consider this if you encounter an error. (25p)

Transfer values that you have set to the addresses in memory to the registers as "12h -> B", "34h -> D". You may need to use more than one instruction for transfer operations. (25p)

Using push and pop instructions, swap the values in the "B" and "D" registers ("12h -> D", "34h -> B"). (25p)

Output the value in register B from the I/O port with address "00h" and the value in register D from the I/O port with address "01h". Check the correctness of your outputs from the "I/O ports" tab. (25p)

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.

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