INTRODUCTION TO MICROCOMPUTERS LAB.

152115025

Homework #3
(BRANCHING INSTRUCTIONS, LOGICAL INSTRUCTIONS)

The grades students received from the mathematics exam are given below.

data: db 01h, 02h, 03h, 04h, 05h, 06h, 07h, 08h, 09h, 0ah, 0bh, 0ch, 0dh, 0eh, 0fh, 10h, 11h, 12h, 13h, 14h

Hint: Data is stored in sequential addresses in memory.

Depending on the passing grade given on port (00h), you must determine how many students passed and failed the course. Those who are equal to or higher than the passing score pass, the others fail. It is expected of you to use logical instructions and subroutines while doing this.

As program output:

You are expected to output the number of students who passed (port: 01h) and failed (port: 02h) the course from the relevant ports. (70p)

Additionally, if the number of students passing the course is more than the number of students failing the course, you are expected to set the port (03h) value to 2, otherwise set it to 1. (30p)

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.