Modern University for Technology & Information
Faculty of Computers & AI
Course: CS416 Assembly Language

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Specialization: 4th CS

Assembly Review Sheet 2

Question

Identify the flags affected by each of the following actions

Question

What are the functions of the following registers: IP register, SP register

IP Register:

The 16-bit IP register contains the offset address of the next instruction that is to execute.

SP Register:

The 16-bit SP register provides an offset value, which, when associated with the SS register (SS: SP), refers to the current word being processed in the stack

Question

During execution of a program, CS contains 4AB6[0]H, SS contains 4A82[0]H,

IP contains 36H, and SP contains 28H. Calculate

a) address of top of the stack **(b) *the* instruction to execute.**

Question

Discus the all types Registers of the Processor 8086.

Question

Calculate the address of the next instruction to be execute for the following: The Register Values CS = 00C5H & IP =0022H .

Question

What is the address determined by the sum of SS and SP registers?

Question

What is the initial value in SP register?

If SP contains 35H, SS = 35DAH &AX contains 53BBH, & BX = 3A3Ah determine the contents of the stack and value of SP after execution of the instruction: PUSH AX & PU BX, POP BX, &POP AX.

Question

Write the Assembly Code to solve the following equation:

Z = 3X + Y / 5H

Where: X =25, Y =37, H =2.

Once using: the Conventional Segment Directive &

Another using: the Simplified Segment Directive.