



Review Sheet 3

Q: Discuss the all types Registers of the Processor 8086.

Q: Discuss the Assembly Code Structure & what is Registers are used with each Segments.

Q: Calculate the address of the next instruction to be execute for the following:

The Register Values CS = 00D9H & IP = 0036H .

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

Q: What is the initial value in SP register? If SP contains 40H and AX contains 43ABH, & BX = 2B5Ah determine the contents of the stack and value of SP after execution of the instruction: PUSH AX & PU BX, POP BX, & POP AX.

Q: Write the Assembly Code to solve the following equation:

$$Y = A + B - 4 * C / D$$

Where: A = 25, B = 37, C = 7 & D = 2.

Once using: the Conventional Segment Directive &

Another using: the Simplified Segment Directive.

Q: Write an assembly code to add the N integers numbers from 1 to N

Where N = 95 Using the Zero Flag in the iteration Loop for N time

$$\text{Sum} = 1 + 2 + 3 + \dots + N$$

And also compute the Avrage = Sum / N

Write Assembly code once using

The Conventional segment Directive

& Another using the Simplified

Answer : Simplified segment Directive

Page 60 , 132

Titel: Add N integer Numbers

.Model Small

.stack 64

.data

I DW 1

N DW 95

SUM DW ?

AVR DW ?

.CODE

P1 PROC FAR

MOV AX, @data

Mov DS, Ax

Mov AX, 0

Mov CX, N

Loop1:

Add AX, I

Inc I

Dec CX

JNZ loop1

Mov SUM, AX

Mov BX, N

Div BX

Mov AVR, AX

Mov AX, 4C00H

INT 21H

P1 EndP

END