

## COMPUTER ENGINEERING

COE 306

ASSEMBLY LANGUAGE

3.6) Main Proc

Mov AX, 4710H ; ~~move the number #710H~~

ADD EAX, 1270;

MOV DS, AX

main ENDP

Main Proc:

This is the starting of the procedure

Mov AX, 4710H

~~is~~ The instruction is telling the computer to copy the number 4710H to the location AX

ADD EAX, 1270

Here, it means the computer should add 1270 to EAX register.

MOV DS, AX

Copy the number in AX register into the location DS register

Main ENDP

This signifies the end of the procedure

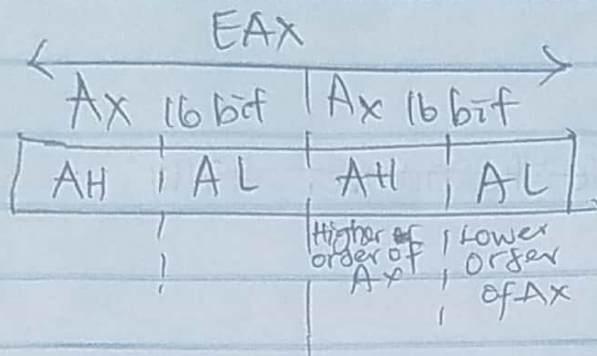
i) value 1: BYTE 6Dh ; this is a hexadecimal

ii) value 2: DWORD ? ; this is a doubleword

iii) value 3: SBYTE -10, -20, -30, -40, -50 ; decimal integers

a) Segmentation in assembly language by using directives which are embedded commands in the source code. <sup>IT</sup> include code, data and stack.

2) The lower families of EAX register are 16 bits and are referred to as AX.



b) No. This is because Assembly language is a processor dependent language -

a) Portability in programming language is a characteristic that is set to allow movement of programs from one operating system to another without having to recreate the program.

4) TITLE subtract 3 integers

INCLUDE Irvine32.inc

~~sub~~ = Code

~~main~~ PROC

main PROC

mov eax, 700h ; EAX = 700h

sub eax, 500h ; EAX = 200h

sub eax, 100h ; EAX = 100h

call DumpRegs ; display registers

exit

main ENDP