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Question 1) Using numeric addresses would link you to a particular or exact location in memory. If it is loaded in a different place than where you wrote instructions it won't work correctly.

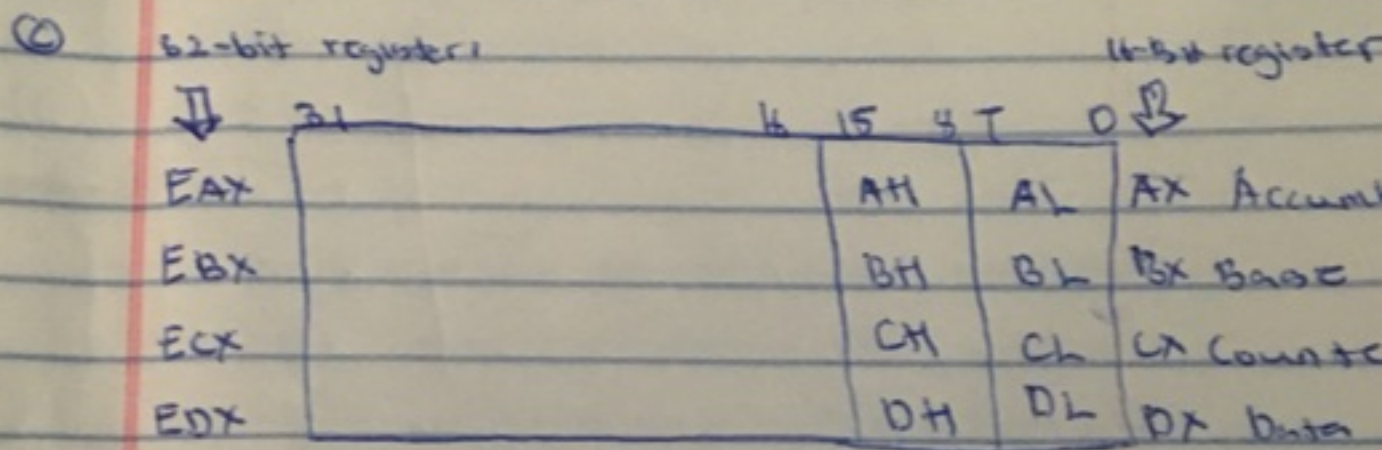
(b) Object files

(i) Listing files

Question 2) Portability is a characteristic attributed to a computer program if it can be used in an operating system other than the one in which it was created without requiring major rework. Porting is the task of doing any work to make the program run in any environment.



Question 20 NO. Each assembly language is based on either a processor family or a particular computer



Ax is the primary accumulator, it is used in input/output and most arithmetic instructions

Bx is known as the base register, it could be used in indexed addressing.

Cx is known as the count register, as the ECX, CX registers store the loop count in iterative operations

*Alif*

Dx is known as the data register.  
It is also used in input/output operations. It is used with Ax register along with Dx for multiply and divide operations.

### Question 3

a Segmentation is achieved when memory model divides the system memory into groups of independent parts referenced by pointers.

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(b) Main Proc

This defines a procedure. Specifies the name of the procedure. Specifies that the procedure is a standard procedure function.

`MOV AX, 4710H`

This tell the computer to copy the number 4710H into the location Ax.



Questions ADD EAX, 1270

MOV DS, AX

This tells the computer to copy the number in AX into the location DS.

main ENDP

③ value 1 BYTE 60h

④ value 2 Dword

This is a data type definition that is specific to Microsoft.

~~Multi~~

QUESTION 4 TITLE Add and Subtract

; This program adds and subtracts  
; integers and stores the sum  
in a variable.

Include Irvine32.inc

.Code

main proc

mov eax, 90000h ; Eax = 10000h  
sub eax, 40000h ; Eax = 50000h  
sub eax, 20000h ; Eax = 30000h  
call DumpRegs ; display registers

exit