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1)

a) Using numeric addresses ties the assembler to specific locations in memory. The application won't load/work if it is a different addressed than the initially programmed address location.

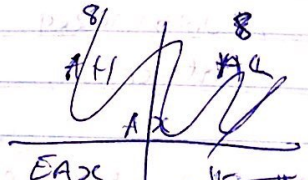
b) The assembler produces OBJECT FILES

2) a.

Portability in programming languages is a characteristic of a code to be utilized in more than one sequence / operating system with re-editing or alteration of the source code.

2b) No, it is not.

Reason; They are based of different bit-processors / operating system



2c)

EAX is used for arithmetic & logical operations (ALU). It is 32-bit. It can be subdivided into 16 bit regs. The AX is divided into 8-bit regs which have AH & AL

TION 3;

Segmentation in assembly language is achieved when the main memory of the computer is divided logically into different segments. & each segment will possess its own base address. The segments are referenced by pointers located in the segment registers & each contain a specific type of data.

```
in Proc          ; STARTS PROCEDURE
ov AX, 47104     ; Moves 47104 into the AX
dd EAX, 127Q     ; Adds 127 (Octal) to the EAX register
ov DS, AX        ; Moves the AX data into the DS
in ENDP          ; ENDS PROCEDURE
```

(destination) (source)

```
alue 1  BYTE  6Dh ; initialized unsigned 8-bit variable
                    declaration

alue 2  DWORD  ?  ; Uninitialized 32-bit unsigned
                    integer

alue 3: SBYTE -10,-20,-30,-40,-50 ; multiple initialized
                                    signed integer.
```

4.

```
TITLE   Subtract  Three  Integers  ( Subtract.asm)
INCLUDE  Irvine32.inc
.data
int 1    WORD    500h
int 2    WORD    300h
int 3    WORD    200h
Answer   WORD    ?
.code
main PROC
mov, cx, int2
sub ax, int1
sub ax, int3
call DumpRegs
exit
main ENDP
END main
```