

1) a. it would not be a good idea because the addresses coded in the instruction would need to be up-to-date whenever a new variable is inserted, before already existing ones.

b. -object files

-OBJ and listing files

-LST files

2) a. Portability of a programming language can be defined as the ability of the language source code to be compiled and run on a wide variety of computer systems.

b. no, because each assembly language is based on either processor family or a specific computer

c.

3) a. segmentation is a computer memory management technique, which divides a computer's primary memory into segments or sections.

b. MOV AX, 47104	;	move 47104 to register AX
ADD EAX, 127Q	;	add 127Q to register EAX
MOV DS, AX	;	move register AX to DS
main ENDP	;	end

c.

4) TITLE Subtract

; This program subtracts 16-bit register unsigned

; integers and stores the sum in variable

. data

Val 1 INT 10

Val 2 INT 5

Val 3 INT 2

. code

main PROC

mov eax, val 1 (10)

sub eax, val 2 (5)

sub eax, val 3 (3)

mov finalVal, eax

call DumpRegs

exit

main ENDP

END main