

~~Revised~~
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Question 1

- a) ~~The answer~~ When writing instructions that access variables, it is not a good idea to use numeric addresses. This is because the addresses coded in the instruction would have to be updated when new variables were inserted before existing ones.
- b) Types of files produced by the assembler are object and listing files.

~~Notes~~

Question 2

c) AX is the primary accumulator, it's 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.

DX is known as the data register

32 bit registers

16 bit

8 bit

16 bit registers

↓

↓

↓

↓

AH

BH

CH

DH

AL

BL

CL

DL

AX

BX

CX

DX

Accumulator

Base

Counter

Data

b) It is not the same because each assembly language is for a specific computer or processor

a) Portability refers to when a program can be used on multiple different operating systems apart from the original OS it was ~~intended~~ made for without needing major changes to the codes

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Question 3 ~~Page~~

b) `Man .proc` - The `proc` directive shows `as` that a procedure is beginning.

`MOV AX, 3298` - The `mov` instruction copies the integer `3298` to the `AX` register.

`ADD FAX, 1239` - The `ADD` instruction adds `1270` to the `FAX` register.

`Man .END P` - The `man .END P` is the ~~the~~ ~~end~~ ^{the} ^{last} statement

9) When an assembly-language program is assembled, ~~the~~ the translator that the assembler carries out is essentially the construction of the text segment and the data segment.

OR

Each segment is used to contain a specific kind of data.