

(1)

Midterm part 1

Answer to the question no: 1

LEA: LEA is an instruction that load "offset variable" while adjusting the address between 16 and 32 bits necessary.

Offset: Offset is an assembler directive in x86 assembly language. The actual meaning of that is address and is a way of handling the overloading of the "mov" instruction. Example: `mov si, offset variable`



Answer to the question no: 2

Data segment is the starting point ~~of the~~ in a program.

• DATA is the name given to this particular segment.

Answer to the question no: 3

ASSUME DS: DATA CS: CODE: In this

Assembly Language Programming it can be noticed that there are different registers present for different purposes. So we have to assume DATA is the name given to Data segment Register and CODE is the name given to code segment register.

Answer to the question no: 4

~~Memory~~ Registers used for memory accessing are given below:

CS - points at the segment containing the current program

DS - generally points at the segment where variables are defined.

ES - extra segment register

SS - points at the segment containing the stack.

The segment registers have a very special purpose - pointing at accessible blocks of memory.