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1) Explain: LEA and Offset

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

OFFSET is an assembler directive in x86 assembly language. It actually means "address" and is a way of handling the overloading of the "mov" instruction.

2) What is difference between Data segment and

.Data?

Difference ~~is~~ between Data segment and ~~segment~~ we take

.Data is ~~in~~ ~~data~~ segment register and

value and address both in AX

In .Data we take only values. So, .Data is effective.

3) Explain the - ASSUME DS : DATA CS : CODE

~~Here DS contains the DATA~~

Here CODE is written in CODE Segment,
and DATA is written in DATA SEGMENT.

4) write down the Registers that are used
for memory Accessing with example.

To Access memory, we can use four
register: BX, SI, DI, BP.

$[BX + SI]$

$[SI]$

$[BX + SI + 28]$

$[BX + DI]$

$[DI]$

$[BX + DI + 28]$

$[BP + SI]$

216

$[BX + SI + 28]$

$[BP + DI]$

$[BX]$

$[BP + DI + 28]$