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1. Why it is never a good idea to store any data in the segment registers?[5]

Answer: There are four parts in segment registers in microprocessor and they are CS, DS, ES and SS. It is possible to store any data in segment register but it’s not a good idea. Segment register build for very special purpose. Because segment registers are supposed to hold addresses/locations. Which is pointing at accessible blocks of memory. Segment resister work together with general purpose register to access any data from memory. The data that reside in segment registers are always bound to be executed, storing random data in register is never a good idea.

2. Explain GPR in terms of storing data.

Answer: There are 8 general Purpose register in 8086 microprocessor. The main purpose of a GPR register is to store numbers. The size of the above registers is 16 bit. Furthermore, 8 general purpose registers AX, BX, CX, DX, SI, DI, BP and SP are divided into two separate 8 bit registers. Such as AX is divided into two 8 bit registers AH and AL. when we modify any of the 8 bit registers 16 bit register is also updated, and when we modify any of the 16 bit register 8 bit register is also updated, and.

For example if AX= 00110011000111011b,

then AH=00110011b and AL=00111011b