

1. Explain LEA:
The LEA instruction is a Load Effective Address which is an indirected instruction, which means the TABLE-ADDR points to memory location at which the address to load is found.

Data segment is a portion of an object file or the corresponding virtual address space of a program that contains initialized static variables, that is global variables and static local variables. Data is a portion of an object file or the corresponding address space of a program that contains initialized static variables that is global variables and static local variables.

4. The memory address register (MAR) is the CPU register that either receives the memory address from which data will be fetched to the CPU, or the address to which data will be sent and stored. Memory buffer register (MBR) also known as memory address register. The memory data register (MDR) holds memory data that is transferred to or from the data bus.

B. The Assume directive tells the assembler to assume that a certain register contains the base of some structure. In your segment CS and DS point to the code segment and the data segment respectively, both the one and only of their respective kind.