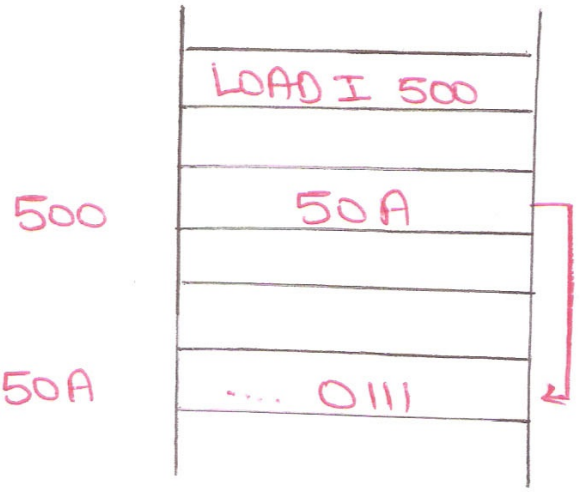
# Addressing Modes :- Indirect Addressing :-

In this mode the operand field of the instruction specifies the address of the Address of Intended operand, e.g. If the instruction LOAD I 500 uses indirect addressing mode, and Contain a value 50A, and memory location 50A Contains 7, then the value 7 will get loaded in the CPU Register






Indirect Addressing :-

Some important points :-

In this addressing scheme the effective address EA and the contents of the operand field are Related as :-

EA = (A) and Content of location 500 that is 50A above

D = (EA) Content of location 50A is 7

→ Negative point of this Scheme is that it requires two memory references to fetch the actual operand. The first memory reference is to fetch the actual Address of the operand from the memory and the second to fetch the actual operand using that address.

→ In this word length determines the size of addressable Space, as the actual address is stored in a word.

for example:- the memory having a word Size of 32 bits can have $2^{32}$ indirect addresses.