COA assignment

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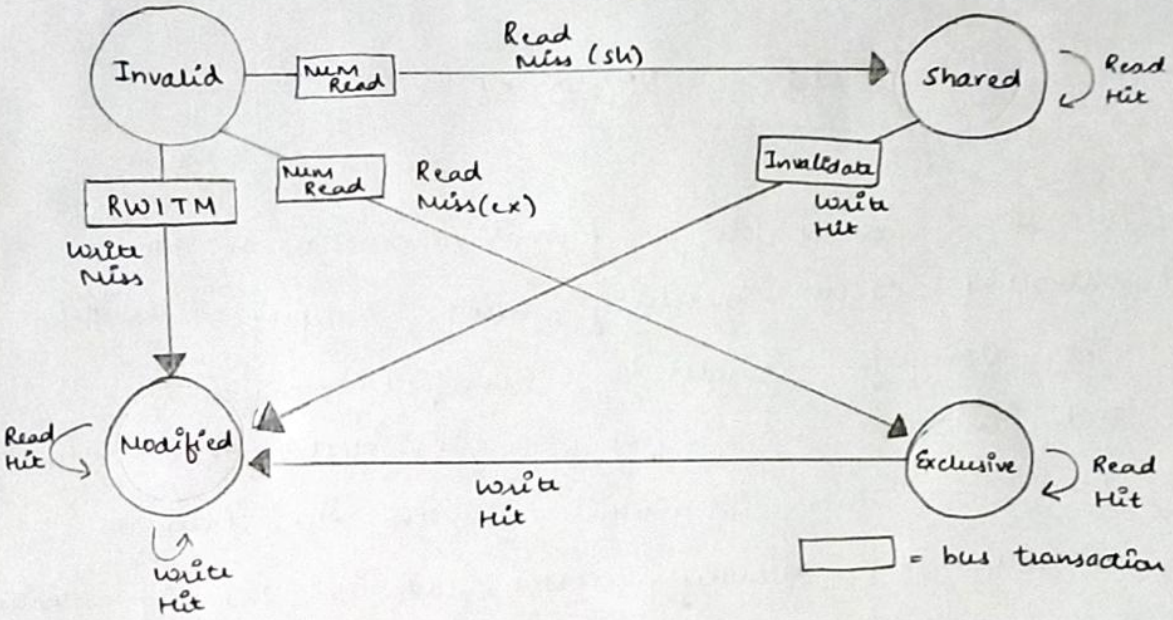
Section - T2

MESI PROTOCOL

The MESI protocol is a formal mechanism for controlling cache coherency using snooping technique. Its acronym stands for modified, exclusive, shared and invalid and refers to the states that cached data can take. Transition between the states is controlled by memory accesses and bus snooping activities. The protocol for cache coherence that is utilized the most is this one. Each cache line bears a status indicating one of the following:

- Modified - This term signifies that the data stored in the cache and main memory are different. This means the data in the cache has been modified and the changes need to be reflected in the main memory.
- Exclusive - This term signifies that the data is clean, i.e. the cache and the main memory hold identical data.
- Shared - This signified that other caches on the computer may also hold this cache line.
- Invalid - This indicates that this cache line is marked as invalid by the word 'invalid'.

MESI - locally Initiated accesses



MESI - remotely initiated accesses