**Associative memory** is also known as content addressable memory (CAM) or associative storage or associative array. It is a special type of memory that is optimized for performing searches through data, as opposed to providing a simple direct access to the data based on the address.

Associative memory of conventional semiconductor memory (usually [RAM](https://www.geeksforgeeks.org/different-types-ram-random-access-memory/)) with added comparison circuity that enables a search operation to complete in a single clock cycle. It is a hardware search engine, a special type of computer memory used in certain very high searching applications.

**Applications of Associative memory :-**

1. It can be only used in memory allocation format.
2. It is widely used in the database management systems, etc.

**Advantages of Associative memory :-**

1. It is used where search time needs to be less or short.
2. It is suitable for parallel searches.
3. It is often used to speedup databases.
4. It is used in page tables used by the virtual memory and used in neural networks.

**Disadvantages of Associative memory :-**

1. It is more expensive than RAM.
2. Each cell must have storage capability and logical circuits for matching its content with external argument.