Hash Table

# Definition:

The Hashtable class represents a collection of **key-and-value pairs** that are organized based on the hash code of the key. It uses the key to access the elements in the collection.

A hash table is used when you need to access elements by using **key**, and you can identify a useful key value. Each item in the hash table has a key/value pair. The key is used to access the items in the collection.

# Common Properties

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| Sl.No | Property | Description |
| 1 | **Count** | Gets the number of key-and-value pairs contained in the Hashtable. |
| 2 | **IsFixedSize** | Gets a value indicating whether the Hashtable has a fixed size. |
| 3 | **IsReadOnly** | Gets a value indicating whether the Hashtable is read-only. |
| 4 | **Item** | Gets or sets the value associated with the specified key. |
| 5 | **Keys** | Gets an ICollection containing the keys in the Hashtable. |
| 6 | **Values** | Gets an ICollection containing the values in the Hashtable. |

# Common Methods

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| Sl.No | Method | Description |
| 1 | **public virtual void Add(object key, object value)** | Adds an element with the specified key and value into the Hashtable. |
| 2 | **public virtual void Clear()** | Removes all elements from the Hashtable. |
| 3 | **public virtual bool ContainsKey(object key)** | Determines whether the Hashtable contains a specific key. |
| 4 | **public virtual bool ContainsValue(object value)** | Determines whether the Hashtable contains a specific value. |
| 5 | **public virtual void Remove(object key)** | Removes the element with the specified key from the Hashtable. |