#️⃣**HashTable**

Hashtable is collection that stores the element in the form of Key-Value pairs, and the data is organized based on the hash code of the key.

## **🔣Hashtable Characteristic**

* Hashtable is key-value pairs
* Implements IDictionary
* Can be any of data type but must unique and not null
* Accepts duplicate value

## **❇️How it Works?**

## **❗Differences between ArrayList**

* **Lookup** : ArrayList using index generated internally number, Hashtable using custom key
* **Performance** : ArrayList is faster
* **Sceneario** : If want to key lookup = hashtable. But if want to add and browser through collection use ArrayList.

## **⚒️How to Create?**

1. using System.Collection
2. Hashtable myHashtable = new Hashtable();

Add(object key, object? value)

myHashTable.Add(”Eid”,1001);

1. myHashTable.Add(”Name”, “James”);

## **♿Access Hashtable**

myHashTable[”Eid”];

## **🔍Contain or Not**

1. **Contains(object key):** Contain key or not, return true if contain, and false is not contain. If key==null, throw System.ArgumentNullException.
2. **ContainsKey(object key):** Check given key present or not, return true if contain, and false is not contain. If key==null, throw System.ArgumentNullException.
3. **ContainsValue(object value):** Check if a value is present in the Hashtable or not. If the given value is present in the collection then it will return true else it will return false.

| *//Checking the key using the Contains methid*  Console.WriteLine("Is EmailID Key Exists : " + hashtable.Contains("EmailID")); *//Checking the key using the ContainsKey methid*  Console.WriteLine("Is EmailID Key Exists : " + hashtable.ContainsKey("EmailID")); *//Checking the value using the ContainsValue method*  Console.WriteLine("Is Mumbai value Exists : " + hashtable.ContainsValue("Mumbai")); |
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## **❌Remove**

Remove(object obj) : Remove element

Clear() : Remove all

| // **Remove** EId as this key exists  employee.**Remove**("EId"); //Removes all elements  employee.Clear(); |
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