C# DAY_6
31/01/2022
Arrays, Array_Lists, Lists.

Q. In c# how the values in ArraryList are stored in the memory.

A. When we initialize the **Array List** , it allocates the enough memory to store the objects up to that capacity. So, the logical size remains **“0”** . When it’s time to expand the size, a new large Array list is created. So, Arraylists are dynamic lives on the **live on heap** memory.

Q. What are Advantages and Disadvantages of **Array List** .

A.

Advantages :

- ArrayLists are re-sizable. So, arrays lists are dynamic.
- ArrayLists overcome the problem of sequential memory.

Disadvantages :

- In arraylists the values are defaultly taken as super data type, called as object type.
- So we need to unbox it so, we need to explicit conversion or into non-copatible type (Like Convert.ToInt32, int.parse) method to perform arthematic operations.

Q. In c# write all data types with Alias names.

A.

Data type	Alias name
1. Byte	⇨ Byte
2. Ushort	⇨ uInt16
3. uint	⇨ uInt32
4. ulong	⇨ uInt64
5. sbyte	⇨ sByte
6. short	⇨ Int16
7. Int	⇨ Int32
8. float	⇨ Int64
9. Double	⇨ Single
10. Decimal	⇨ Double
11. Bool	⇨ Bool
12. Char	⇨ Char
13. string	⇨ string

Q. In c# write all data types with Alias names.

A. Differences b/w collections and generics.

	Collections	Generics
Name space	Using.System.Collections;	Using.System.Collections.Generic;
Element type	Object	Primitive data type
Type casting	Yes	No
Syntax	ArrayList array_list = new ArrayList();	Var my_list = new list<int> {};

Q. In c# how the values in List<T> are stored in the memory.

A. Lists can carry a large amount of data. Cause it dynamically grows, so it will create a new size. So they will be keep on addition of subsequent addition of elements until reaches the threshold value. So, lists will be living on the heap memory.

**********Thank_You**********