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| DAY 6 ASSIGNMENT PRESENTED  BY  POTUKANUMA JEEVITHA  31-01-2022 |

**1.Research and find how the values of ArrayList are stored in the memory?**

The elements of an ArrayList are stored in a chunk of contiguous memory. When that memory becomes full, a larger chunk of contiguous memory has to be allocated (usually twice the size) and the existing elements are copied into this new chunk. We call this chunk the capacity of the ArrayList object

**2. What are the Dis-Advantages of ArrayList?**

1.Unboxing.

2.Runtime error-when other data type is added.

**3. In a tabular format write the differences between Collections of Generics.**

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| **Properties** | **Collections** | **Generics** |
| Namespace | System.collections | System.collections.generic |
| Each element is of what type | Object | Int |
| Do you need type casting here | yes | No |
| Example | ArrayList | List<T> |

**4.in a tabular format write all data types in C# and write the respective alies name?**

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| **Data Type** | **Alies Name** |
| Byte | System.Byte |
| Ushort | System.UInt16 |
| Uint | System.UInt32 |
| Ulong | System.UInt64 |
| Sbyte | System.SByte |
| Short | System.Int16 |
| Int | System.Int32 |
| Long | System.Int64 |
| Float | System.Single |
| Double | System.Double |
| Decimal | System.Decimal |
| Bool | System.Boolean |
| Char | System.Char |
| String | System.String |

**5. Research and find how the values of list<T> are stored in the memory?**

The memory to store the value types is within the memory allocated for the System. Array (i.e. "Over Here"). In an ArrayList each element is just a reference to a boxed value type, so the actual memory to store each value type is elsewhere on "The Heap", i.e. somewhere "Over There"

**6.Write example programs for Implicit and Explicit type casting?**

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| **Implicit Type Casting** | **Explicit Type Casting** |
| Short a=25;  Int b=a;  Console.ReadLine(); | Int a=25  Short b=a;  Console.ReadLine(); |