**What’s meaning of Mutable and Immutable in English?**

Answers are.

* Mutable: Can change
* Immutable: Cannot Change

**Garbage Collection in C#**

In low level language like C#, the programmer is responsible for the memory allocation it has led to less bugs and slow progress in development. dotNet is a managed-memory platform. The .Net garbage collector is manages the allocation and release of memory in .Net applications.

Record Types:

Garbage collection (GC) is a memory management feature in C# that automatically frees up memory space for objects that are no longer needed by the program. GC helps prevent memory leaks and ensures that a program doesn't exceed its memory quota. It also reduces the chance of memory-related bugs by taking the manual management of memory away from developers.

**Named Arguments:**

Named arguments allow us to specify parameters by name instead of position. It improved the readability of code.

**Optional parameter:**

The parameters of a method or constructor can be required or optional. We need to provide a value for all required parameters, but we can omit arguments for optional parameters. When we define a parameter as optional, we need to define a default value.

**IList Methods:**

* **Where:** use to filter the data with predicate as a parameter.
* **OrderBy:** Filter the data in ascending by telling the property on which it should orderby
* **OrderByDesending:** Filter the data in descending.
* **Select:** To return the list of a data or a specific property after all the conditions
* **First:** Returns the first record in list, but if list is null then will throw an error.
* **FirstOrDefault:** Returns the first record in list but if list in empty then with handle the null exception
* **Single:** if there is only 1 item in list then will return that single record. If there are multiple records, then it will throw an error of invalid logic implementation.
* **SingleOrDefault**: If there is one record then it will return that single record but if there are multiple records then will handle the exception.
* **Skip:** It will allow us to skip exactly how many rows we want to skip.
* **Take:** it will allow us to take exactly the number of records we want.
* **GroupBy:** To filter the data in group against any property.