**Arrays in C#**

An **Array** is a collection of items stored at contiguous memory locations. Arrays in C# are strongly typed, meaning each element in the array must be of the same type.

**Features of Arrays:**

1. **Fixed Size**: Once declared, the size of an array cannot be changed.
2. **Index-Based Access**: Elements are accessed via zero-based indexing.
3. **Strongly Typed**: All elements must be of the same type.
4. **Efficient**: Arrays provide constant-time access to elements.

**Common Use Cases:**

1. **Storing a collection of items** (e.g., student names, product prices).
2. **Matrix operations** for numerical computing.
3. **Static datasets** where the size is known beforehand.
4. **Data transformations** using LINQ.

**Commonly Used Methods/Operations:**

1. **Length**: Returns the number of elements in the array.
2. **GetValue(index) and SetValue(value, index)**: Get or set a value at a specific index.
3. **Sort()**: Sort the array.
4. **Reverse()**: Reverse the array.