

1.Create lists

```
var names=new List<string>{"Ram", "Raheem", "Robert"};

foreach(var name in names)
{
    Console.WriteLine($"Hello {name.ToUpper()}!");
}
O/P: Hello RAM!
Hello RAHEEM!
Hello ROBERT!
```

2. //Modify list contents

```
var names=new List<string>{"Ram", "Raheem", "Robert"};
//Console.WriteLine();
names.Add("Maria");
names.Add("Bill");
names.Add("al");
names.Remove("al");
foreach(var name in names)
{
    Console.WriteLine($"Hello {name.ToUpper()}!");
}
O/P: Hello RAM!
Hello RAHEEM!
Hello ROBERT!
Hello MARIA!
Hello BILL!
```

3. //Search and sort lists

```
var names=new List<string>{"Ram", "Raheem", "Robert"};
var index=names.IndexOf("Robert");
if(index!=-1)
    Console.WriteLine($"The name {names[index]} is at index {index}");
var notFound = names.IndexOf("Not Found");
Console.WriteLine($"When an item is not found, IndexOf returns {notFound}");
//Sorting
Console.WriteLine();
Console.WriteLine("Sorting:");
names.Sort();
foreach (var name in names)
{
    Console.WriteLine($"Hello {name.ToUpper()}!");
}
```

```
}  
O/P: The name Robert is at index 2  
When an item is not found, IndexOf returns -1
```

```
Sorting:  
Hello RAHEEM!  
Hello RAM!  
Hello ROBERT!
```

4. //Lists of other types

```
var fibonacciNumbers = new List<int> {1, 1};  
var previous = fibonacciNumbers[fibonacciNumbers.Count - 1];  
var previous2 = fibonacciNumbers[fibonacciNumbers.Count - 2];  
  
fibonacciNumbers.Add(previous + previous2);  
  
foreach(var item in fibonacciNumbers)  
    Console.WriteLine(item);
```

```
O/P: 1  
1  
2
```

5. //Challenge

```
var fibonacciNumbers = new List<int> {1, 1};  
  
while (fibonacciNumbers.Count < 20)  
{  
    var previous = fibonacciNumbers[fibonacciNumbers.Count - 1];  
    var previous2 = fibonacciNumbers[fibonacciNumbers.Count - 2];  
  
    fibonacciNumbers.Add(previous + previous2);  
}  
foreach(var item in fibonacciNumbers)  
    Console.WriteLine(item);
```

```
O/P: 1  
1  
2  
3  
5  
8  
13  
21
```

34
55
89
144
233
377
610
987
1597
2584
4181
6765