Assignment-4

1.Create an array of integers and use a for loop to print out each element of the array.

Code:

Question1.java

```java
1  package com.tecnotree.Assignment4;
2  import java.util.Scanner;
3
4  public class Question1 {
5      //Printing Array Elements
6      public static void main(String[] args) {
7          int[] arr  = new int[10];
8          Scanner in = new Scanner(System.in);
9          System.out.println("Enter Elements:");
10         for(int i =0;i<arr.length;i++)
11             arr[i] = in.nextInt();
12         System.out.println("Array Elements are:");
13         for(int i =0;i<arr.length;i++)
14             System.out.println(arr[i]);
15         in.close();
16     }
17
18 }
```

Codeshare Link: https://codeshare.io/OdEpwW

Output:

```
Enter Elements:
10 20 30 40 50 60 70 80 90 100
Array Elements are:
10 20 30 40 50 60 70 80 90 100
```

2.Create an array of strings and use a for-each loop to print out each element of the array.

Code:

Question2.java

```
1  package com.tecnotree.Assignment4;
2
3  import java.util.Scanner;
4
5  public class Question2 {
6      //Printing Array of Strings
7⊖      public static void main(String[] args) {
8              String[] names   = new String[10];
9              Scanner in = new Scanner(System.in);
10             System.out.println("Enter Names:");
11             for(int i =0;i<names.length;i++)
12                 names[i] = in.nextLine();
13             System.out.println("Names are:");
14             for(String name:names)
15                 System.out.println(name);
16             in.close();
17         }
18 }
```

Codeshare Link: https://codeshare.io/eV6174

Output:

```
Enter Names:
Fawaz
Fawaz
Fawaz
Fawaz
Fawaz
Names are:
Fawaz Fawaz Fawaz Fawaz Fawaz
```

3.Create an array of doubles and use a while loop to print out each element of the array.

Code:

Question3.java

```java
1  package com.tecnotree.Assignment4;
2
3  import java.util.Scanner;
4
5  public class Question3 {
6      //double array and while loop
7          public static void main(String[] args) {
8              Scanner in = new Scanner(System.in);
9              double[] arr = new double[10];
10             int counter = arr.length-1;
11             int i =0;;
12             System.out.println("Enter Elements:");
13             for(i =0;i<arr.length;i++)
14                 arr[i] = in.nextDouble();
15             i = 0;
16             System.out.println("Array Elements are:");
17             while(counter>0) {
18                 System.out.println(arr[i]);
19                 i++;
20                 counter--;
21             }
22             in.close();
23         }
24 }
```

Codeshare Link: https://codeshare.io/km81OY

Output:

```
Enter Elements:
0.223 32.234 2342.232 22.32 23.32
Array Elements are:
0.223
32.234
2342.232
22.32
```

4.Create an array of characters and use a do-while loop to print out each element of the array.

Code:

Question4.java

```java
1  package com.tecnotree.Assignment4;
2
3  public class Question4 {
4
5      public static void main(String[] args) {
6          char[] name = new char[6];
7          name[0] = 'M';
8          name[1] = 'Y';
9          name[2] = 'S';
10         name[3] = 'O';
11         name[4] = 'R';
12         name[5] = 'E';
13
14         int i=0;
15
16         do {
17             System.out.println(name[i]);
18             i++;
19         }while(i<name.length);
20     }
21
22 }
```

Codeshare Link: https://codeshare.io/yo0vkv

Output:

```
M
Y
S
O
R
E
```

5.Create an array of integers and use the Arrays class method sort() to sort the array in ascending order.

Code:

Question5.java

```
1  package com.tecnotree.Assignment4;
2
3  import java.util.Arrays;
4
5  public class Question5 {
6
7⊖     public static void main(String[] args) {
8          int[] array = {40,20,70,80,50};
9          Arrays.sort(array);
10         System.out.println(Arrays.toString(array));
11         System.out.println();
12     }
13
14  }
```

Codeshare Link: https://codeshare.io/VZEMb8

Output:

```
[20, 40, 50, 70, 80]
```

6.Create an array of strings and use the Arrays class method

binarySearch() to find the index of a specific string in the array.

Code:

Question6.java

```
1 package com.tecnotree.Assignment4;
2
3 import java.util.Arrays;
4
5 public class Question6 {
6
7⊖     public static void main(String[] args) {
8          int[] num = {1,2,3,4,56,6};
9          int index = Arrays.binarySearch(num,56);
10         System.out.println(index);
11
12     }
13
14 }
15
```

Codeshare Link: https://codeshare.io/WdEMo3

Output:

```
4
```

7.Create a string and use the String class method split() to split the string into an array of substrings.

Code:

Question7.java

```java
1  package com.tecnotree.Assignment4;
2
3  public class Question7 {
4
5      public static void main(String[] args) {
6          String name = "Mohammed-Fawaz";
7          String[] split = name.split("-", 8);
8          for(String x:split) {
9          System.out.println(x);
10         }
11      }
12  }
```

Codeshare Link: https://codeshare.io/zyA1Qk

Output:

```
Mohammed
Fawaz
```

8.Create a string and use the String class method replace() to replace a specific substring in the string with a new substring.

Code:

Quesion8.java

```
 1  package com.tecnotree.Assignment4;
 2
 3  public class Question8 {
 4
 5⊖     public static void main(String[] args) {
 6            String name = "Mohammed Fawaz";
 7            System.out.println(name.replace("Moha", "ABc"));
 8
 9        }
10
11  }
```

Codeshare Link: https://codeshare.io/km81jO

Output:

```
ABcmmed Fawaz
```

9.Create a string and use the String class method substring() to extract a portion of the string.

Code:

Question9.java

```
 1  package com.tecnotree.Assignment4;
 2
 3  public class Question9 {
 4
 5⊖     public static void main(String[] args) {
 6            String name = "Mohammed Fawaz";
 7            System.out.println(name.substring(7));
 8
 9        }
10
11  }
```

Codeshare Link: https://codeshare.io/j0d1yK

Output:

```
d Fawaz
```

10.Create a string and use the String class method length() to find the length of the string.

Code:

Question10.java

```java
package com.tecnotree.Assignment4;

public class Question10 {

    public static void main(String[] args) {
        String name = "Mohammed Fawaz";
        System.out.println(name.length());
    }

}
```

Codeshare Link: https://codeshare.io/1Y84gn

Output:

```
14
```