

Assignment:04

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

<https://codeshare.io/LwER3b>

```
package com.tecnotree.assignment4;

public class Array {
    public static void main(String[] args) {
        int[] num = {1,2,3,4,5};
        int i;
        for(i=0;i<num.length;i++)
            System.out.println(num[i]);
    }
}
```

Output:

```
1
2
3
4
5
```

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

<https://codeshare.io/gL930R>

```
package com.tecnotree.assignment4;

public class ArrayString {
    public static void main(String[] args) {
        String sentence = "Virat Kohli has won millions of heart";

        String[] words = sentence.split(" ");

        for (int i = 0; i < words.length; i++) {
            System.out.println(words[i]);
        }
    }
}
```

Output:

```
Virat
Kohli
has
won
millions
of
heart
```

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

<https://codeshare.io/MNERbQ>

```
package com.technotree.assignment4;

public class Double {
    public static void main(String[] args) {
        double[] num = {24.5, 25.0, 26.8, 23.2, 22.7};

        int i = 0;
        while (i < num.length) {
            System.out.println(num[i]);
            i++;
        }
    }
}
```

Output:

```
24.5
25.0
26.8
23.2
22.7
```

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

<https://codeshare.io/Rbvp83>

```
package com.tecnotree.assignment4;

public class DoWhile {
    public static void main(String[] args) {
        char[] letters = {'a', 'b', 'c', 'd', 'e'};

        int i = 0;
        do {
            System.out.println(letters[i]);
            i++;
        } while (i < letters.length);
    }
}
```

Output:

```
a
b
c
d
e
```

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

<https://codeshare.io/LwER3b>

```
package com.tecnotree.assignment4;

import java.util.Arrays;

public class ArrayClass {

    public static void main(StringExam[] args) {
        int[] numbers = {9, 3, 6, 1, 8, 4, 7, 2, 5};

        Arrays.sort(numbers);

        for (int i = 0; i < numbers.length; i++) {
            System.out.println(numbers[i]);
        }
    }
}
```

Output:

```
1
2
3
4
5
6
7
8
9
```

6. Create an array of strings and use the Arrays class method `binarySearch()` to find the index of a specific string in the array.

<https://codeshare.io/ZJEODV>

```
package com.tecnotree.assignment4;

import java.util.Arrays;

public class Binary {

    public static void main(String[] args) {
        String[] names = {"Virat", "Harsha", "Varsha"};

        Arrays.sort(names);

        int index = Arrays.binarySearch(names, "Varsha");

        System.out.println("Index of Varsha in the array: " + index);
    }
}
```

Output:

```
Index of Varsha in the array: 1
```

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

<https://codeshare.io/9OLE1X>

```
package com.tecnotree.assignment4;

public class Strings {
    public static void main(String[] args) {
        String[] fruits = {"apple", "banana", "orange", "grape", "mango"};

        for (String fruit : fruits) {
            System.out.println(fruit);
        }
    }
}
```

Output:

```
• apple
  banana
  orange
  grape
  mango
```

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

<https://codeshare.io/K8ERZo>

```
package com.tecnotree.assignment4;

public class StringExam {
    public static void main(String[] args) {
        String message = "Hello, world!";

        String newMessage = message.replace("world", "Java");

        System.out.println("Original message: " + message);
        System.out.println("New message: " + newMessage);
    }
}
```

Output:

```
Original message: Hello, world!
New message: Hello, Java!
```


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

<https://codeshare.io/dwQn6M>

```
package com.tecnotree.assignment4;

public class SubString {
    public static void main(String[] args) {
        String message = "Hello, world!";

        String portion = message.substring(0, 5);

        System.out.println("Original message: " + message);
        System.out.println("Extracted portion: " + portion);
    }
}
```

Output:

```
Original message: Hello, world!
Extracted portion: Hello
```

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

<https://codeshare.io/vwjOPL>

```
package com.tecnotree.assignment4;

public class Length {
    public static void main(String[] args) {
        String message = "Hello, world!";

        int length = message.length();

        System.out.println("The length of the string is: " + length);
    }
}
```

Output:

```
The length of the string is: 13
```