

6. STRINGS

1.

Creating a string-

```
public class Excercise1
{
    public static void main(String[] args) {
        String str1 = "Hello"; //method1
        String str2 = new String("World!"); //method2
        System.out.println(str1);
        System.out.println(str2);
    }
}
```

Output-

Hello
World!!

2.

Concatenating two strings using + operator-

```
public class Excercise2
{
    public static void main(String[] args) {
        String str = "Hello" + " " + "World!";
        System.out.println(str);
    }
}
```

Output-

Hello World!

3.

Length of the string-

```
public class Excercise3
{
    public static void main(String[] args) {
        String str = "Hello World!";
        System.out.println("Length of the string: " +str.length());
    }
}
```

Output-

Length of the string: 12

4.

Extracting a string using Substring-

```
public class Excercise4
```

```

{
    public static void main(String[] args)
    {
        String str = "Hello World!";
        System.out.println(str.substring(6,12));
        System.out.println(str.substring(3));
    }
}

```

Output-

World!
lo World!

5.
Searching in strings using indexOf()-

```

public class Excercise5
{
    public static void main(String[] args)
    {
        String str = "Hello World!";
        System.out.println("Index of W in the string: "+str.indexOf("W"));
    }
}

```

Output-

Index of W in the string: 6

6.
Matching a String Against a Regular Expression With matches()-

```

public class Excercise6
{
    public static void main(String[] args)
    {
        String str = "Hello World!";
        System.out.println(str.matches("Hello"));
        System.out.println(str.matches("Hello(.*)"));
    }
}

```

Output-

false
true

7.
Comparing strings using the methods equals()-

```

public class Excercise7
{
    public static void main(String[] args)

```

```

    {
        String str1 = new String("Hello");
        String str2 = new String("hello");
        String str3 = new String("HELLO");
        String str4 = new String("Hello");
        System.out.println("Comparing " + str1 + " and " + str2+ " : " + str1.equals(str2));
        System.out.println("Comparing " + str1 + " and " + str3+ " : " + str1.equals(str3));
        System.out.println("Comparing " + str1 + " and " + str4+ " : " + str4.equals(str4));
    }
}

```

Output-

Comparing Hello and hello : false
Comparing Hello and HELLO : false
Comparing Hello and Hello : true

8.

Using equalsIgnoreCase(), startsWith(), endsWith() and compareTo()-

```

public class Excercise8
{
    public static void main(String[] args)
    {
        String str1 = new String("hello");
        String str2 = new String("HELLO");
        System.out.println("Comparing using equalsIgnoreCase : " +
str1.equalsIgnoreCase(str2));
        System.out.println("Comparing using compareTo : " + str1.compareTo(str2));
        System.out.println("Using startsWith() : " + str1.startsWith("A"));
        System.out.println("Using endsWith() : " + str2.endsWith("O"));
    }
}

```

Output-

Comparing using equalsIgnoreCase : true
Comparing using compareTo : 32
Using startsWith() : false
Using endsWith() : true

9.

Trimming strings with trim()-

```

public class Excercise9
{
    public static void main(String[] args)
    {
        String str = new String(" Hello World! ");
        System.out.println(str.trim());
    }
}

```

Output-
Hello World!

10.
Replacing characters in strings with replace()-

```
public class Excercise10
{
    public static void main(String[] args)
    {
        String str = new String("Hello World!");
        System.out.println(str.replace('o','i'));
    }
}
```

Output-
Helli Wirld!

11.
Splitting strings with split()-

```
public class Excercise11
{
    public static void main(String[] args)
    {
        String str = new String("Hello World!");
        String[] words=str.split("\\s");
        for(String w:words)
            System.out.println(w);
    }
}
```

Output-
Hello
World!

12.
Converting Numbers to Strings with valueOf()-

```
public class Excercise12
{
    public static void main(String[] args)
    {
        int i=100;
        String s=String.valueOf(i);
        System.out.println(i+100);    //here + is binary plus operator
        System.out.println(s+100);    //here + is string concatenation operator
    }
}
```

Output-
200
100100

13.
Converting integer objects to Strings-

```
public class Excercise13
{
    public static void main(String[] args)
    {
        int a = 1234;
        System.out.println("Integer = " + a);
        String str = Integer.toString(a);
        System.out.println("String = " + str);
    }
}
```

Output-
Integer = 1234
String = 1234

14.
Converting to uppercase and lowercase-

```
public class Excercise14
{
    public static void main(String[] args)
    {
        String str = "Hello World!";
        System.out.println(str.toLowerCase());
        System.out.println(str.toUpperCase());
    }
}
```

Output-
hello world!
HELLO WORLD!