### charAt

```
String str = "123345a";
for (int i = 0; i < str.length(); i++)</pre>
    if (!Character.isDigit(str.charAt(i)))
        System.out.println("Not a number");
        break;
/*
Output:
Not a number
*/
```

#### contains

```
String[] names = { "Mohammad", "Mohammad Ali",
            "AliMohammad", "Reza", "Saman" };
for (int i = 0; i < names.length; i++)</pre>
    String name = names[i];
    if(name.contains("Mohammad"))
        System.out.println(name);
/*
Output:
Mohammad
Mohammad Ali
AliMohammad
*/
```

### endsWith

```
String[] words = { "init", "operation", "explosion",
            "arm", "satisfaction" };
for (int i = 0; i < words.length; i++)</pre>
    String word = words[i];
    if(word.endsWith("tion") || word.endsWith("sion"))
        System.out.println(word);
/*
Output:
operation
explosion
satisfaction
*/
```

### startsWith

```
String[] verbs = { "empower", "enforce", "go", "encourage", "come" };
for (int i = 0; i < verbs.length; i++)</pre>
    String verb = verbs[i];
    if(verb.startsWith("en") || verb.startsWith("em"))
        System.out.println(verb);
Output:
empower
enforce
encourage
*/
//Also there is a method with startsWith(prefix, toffset) signature
```

## toLower/UpperCase

```
String str = "Hello World!";
System.out.println(str.toLowerCase());
System.out.println(str.toUpperCase());
/*
Output:
hello world!
HELLO WORLD!
*/
```

### indexOf

```
String str = "The fox jumps over the dog.";
System.out.println(str.indexOf("fox"));
System.out.println(str.indexOf("dog"));
System.out.println(str.lastIndexOf('e'));
/*
Output:
23
21
*/
//Also there is a method with indexOf(str, fromIndex) signature
```

## substring

```
String str = "apple => fruit => edible";
int index = str.indexOf("=>");
System.out.println(str.substring(0, index));
int nextIndex = str.indexOf("=>", index + 1);
System.out.println(str.substring(index + 2, nextIndex));
System.out.println(str.substring(nextIndex + 2));
/*Output:
apple
fruit
edible
```

#### trim

```
String str = "apple => fruit";
int index = str.indexOf("=>");
System.out.println(str.substring(0, index).trim());
System.out.println(str.substring(index + 2).trim());
/*
Output:
apple
fruit
*/
```

# String.format

```
String.format("(%.2f, %.2f)", x, y);
```

### replace

```
String str = "Hello! It's me.\nHello! Can you hear me?!";
System.out.println(str.replace("Hello", "Hi"));

/*Output:
Hi! It's me.
Hi! Can you hear me?!
*/
```

# Immutability

```
String str = " test ";
str.toUpperCase();
str.trim();
System.out.println(str);
```

#### intern

```
String s1 = "Salam";
String s2 = "Salam";
String s3 = "Salam".intern();
String s4 = new String("Salam");
String s5 = new String("Salam").intern();
if (s1 == s2)
    System.out.println("s1 and s2 are same");
if (s1 == s3)
    System.out.println("s1 and s3 are same");
if (s1 == s4)
    System.out.println("s1 and s4 are same");
if (s1 == s5)
    System.out.println("s1 and s5 are same");
```

```
/*Output:
s1 and s2 are same
s1 and s3 are same
s1 and s5 are same
*/
```