



Lets Code!

Fundamentals: Strings

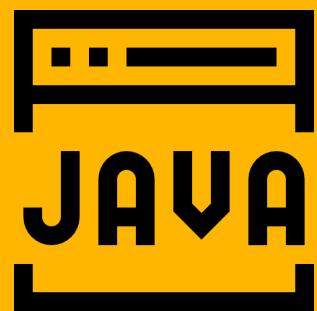
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Key Terms

- Immutable
- Substring
- Concatenation

- Equality



Strings

Strings

Java does not have a built-in string type. Instead, the standard Java library contains a predefined class called `String`.

```
String e = ""; // an empty string
String greeting = "Hello";
```

Substrings

You can extract a substring from a larger string with the `substring` method of the `String` class.

```
String greeting = "Hello";
String s = greeting.substring(0, 3);
```

The second parameter of `substring` is the first position that you do not want to copy.

Concatenation

Use + to join (concatenate) two strings.

```
String expletive = "Expletive"; String PG13 = "deleted";
String message = expletive + PG13;
```

When you concatenate a string with a value that is not a string, the latter is converted to a string.

```
int age = 13;  
String rating = "PG" + age;
```

```
String all = String.join(" / ", "S", "M", "L", "XL"); // all is the string "S / M /
```

Strings Are Immutable

The String class gives no methods that let you change a character in an existing string.

```
greeting = greeting.substring(0, 3) + "p!";
```

Since you cannot change the individual characters in a Java string, the documentation refers to the objects of the String class as immutable.

Testing Strings for Equality

To test whether two strings are equal, use the equals method.

```
s.equals(t)  
"Hello".equals(greeting)  
"Hello".equalsIgnoreCase("hello")
```

Do not use the == operator to test whether two strings are equal

Empty and Null Strings

The empty string "" is a string of length 0.

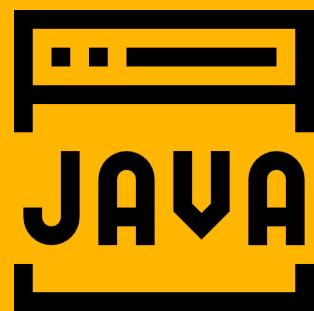
```
if (str.length() == 0)
```

or

```
if (str.equals(""))
```

However, a String variable can also hold a special value, called null

```
if (str == null)  
  
if (str != null && str.length() != 0)
```



Reading the Online API Documentation

Building Strings

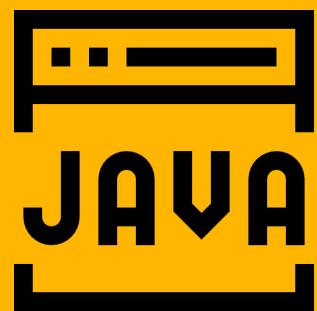
Using the `StringBuilder` class allows you to build a string from many small pieces.

```
StringBuilder builder = new StringBuilder();  
  
builder.append(ch); // appends a single character  
builder.append(str); // appends a string  
  
String completedString = builder.toString();
```

Wrap Up

- Immutable
- Substring
- Concatenation

- Equality



Keep Coding !!!

Clean Code is Happy Code