Java programs process values.
In Java, every value has a type (what does that mean?)

**The type of a value determines what operations can be applied to the value.**

<table>
<thead>
<tr>
<th>value</th>
<th>type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>int</td>
</tr>
<tr>
<td>1.0</td>
<td>double</td>
</tr>
<tr>
<td>'1'</td>
<td>char</td>
</tr>
<tr>
<td>true</td>
<td>boolean</td>
</tr>
<tr>
<td>&quot;1.0&quot;</td>
<td>String</td>
</tr>
</tbody>
</table>

*Primitive types*

*Object types or reference types*

**What is String(s)?**
- **a type**
- **String objects**: "abc", "Hello World!", "Java 8", etc. All these are String objects.
- **class** String (a class that defines the String type, and what operations (or methods) are available to String objects. From class String we can generate many String objects.

**String operations**
"abc" + "def" => "abcdef"
"abc".length() 3
"abc".toUpperCase() "ABC"
"abc".charAt(1) => 'b'
concat
equals
contains
indexOf
startsWith
trim
replace
substring
toLowerCase

**An example**: StringTest.java