

More about Strings

Math class

indexOf and compareTo

indexOf(String str)

Returns the index within this string of the first occurrence of the specified substring.

If the substring does not exist, then -1 is returned.

```
String myStr = "Hello all! It is a beautiful day!";
```

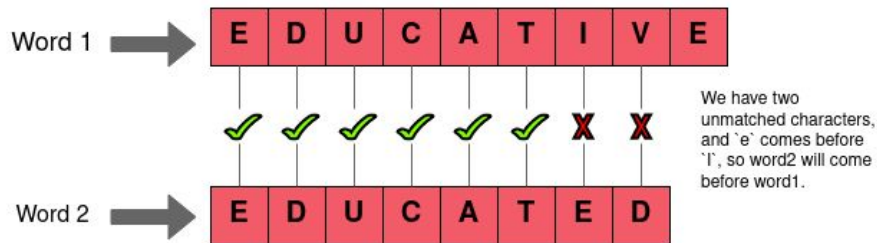
```
myStr.indexOf("all"); ⇒ 6
```

```
myStr.indexOf("sun"); ⇒ -1
```



CompareTo(String anotherString)

Compares two strings lexicographically.



- compareTo returns 0 exactly when the equals(Object) method would return true.
- If the strings we are comparing have different characters at one or more index positions:

`this.charAt(k)-anotherString.charAt(k)`

- If there is no index position at which they differ:

`this.length()-anotherString.length()`

Good to know: String.valueOf()

The String.valueOf() method converts int to String. The valueOf() is the static method of String class.

```
String.valueOf(3) ==> "3"
```



parseInt(String str)

Parses the string argument as a signed decimal integer.

```
Integer.parseInt("454") ==> 454
```



Math Class

The Math class is defined in the `java.lang` package. We do not need to import this class. It is imported by default.

Methods in the Math class are static. We can call them using the class name without creating an object.



Some Math methods

Math.sqrt(x)

Math.pow(x,y)

Math.sin(x)

Math.cos(x)

Math.tan(x)

Math.asin(x)

Math.acos(x)

Math.atan(x)

Math.exp(x)

Math.log(x)

Math.log10(x)

Math.round(x)

Math.abs(x)

Math.max(x,y)

Math.min(x,y)

Math.PI -> Value

