

CSE11 Discussion 2

with Chris Taylor

Reading docs

“Constructors”, how you can set up the variable (not super important yet)

Constructor Summary

Constructors

Constructor and Description

<code>Scanner(File source)</code>	Constructs a new Scanner that produces values scanned from the specified file.
<code>Scanner(File source, String charsetName)</code>	Constructs a new Scanner that produces values scanned from the specified file.
<code>Scanner(InputStream source)</code>	Constructs a new Scanner that produces values scanned from the specified input stream.
<code>Scanner(InputStream source, String charsetName)</code>	Constructs a new Scanner that produces values scanned from the specified input stream.
<code>Scanner(Path source)</code>	Constructs a new Scanner that produces values scanned from the specified file.
<code>Scanner(Path source, String charsetName)</code>	Constructs a new Scanner that produces values scanned from the specified file.
<code>Scanner(Readable source)</code>	Constructs a new Scanner that produces values scanned from the specified source.
<code>Scanner(ReadableByteChannel source)</code>	Constructs a new Scanner that produces values scanned from the specified channel.
<code>Scanner(ReadableByteChannel source, String charsetName)</code>	Constructs a new Scanner that produces values scanned from the specified channel.
<code>Scanner(String source)</code>	Constructs a new Scanner that produces values scanned from the specified string.

“Methods”, the functions available

Method Summary

Methods

Modifier and Type

void	<code>close()</code> Closes this scanner.
Pattern	<code>delimiter()</code> Returns the Pattern this scanner is using.
String	<code>findInLine(Pattern pattern)</code> Attempts to find the next occurrence of the specified pattern.
String	<code>findInLine(String pattern)</code> Attempts to find the next occurrence of the specified pattern.
String	<code>findWithinHorizon(Pattern pattern, int n)</code> Attempts to find the next occurrence of the specified pattern, up to n characters.
String	<code>findWithinHorizon(String pattern, int n)</code> Attempts to find the next occurrence of the specified pattern, up to n characters.
boolean	<code>hasNext()</code> Returns true if this scanner has a next token.
boolean	<code>hasNext(Pattern pattern)</code> Returns true if the next complete match of the specified pattern exists.
boolean	<code>hasNext(String pattern)</code> Returns true if the next complete match of the specified pattern exists.

```
Scanner scnr = new Scanner(System.in);  
scnr.close()  
scnr.hasNext()
```

Methods

Output

("void" means no output)

Inputs

`void`

`moveTo(int x, int y)`

Method to move turtle to the given x and y location

`int`

`getXPos()`

Method to get the current x position

Now use your powers

How do I see if a substring exists inside another string in Java 1.4?

▲ How can I tell if the substring "template" (for example) exists inside a Java 1.4 String object?

12 It would be great if it was not a case-sensitive check.

▼ Thanks!

★ java string substring

share improve this question

edited Sep 29 '12 at 23:41



Michael Ratanapintha

18.2k ● 4 ● 19 ● 34

asked Mar 26 '09 at 21:17



joe

4,014 ● 26 ● 70 ● 118

add a comment

Input: a String to test if inside

Output: something about where the string is

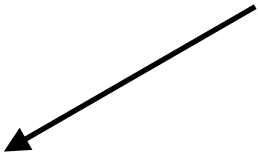
int	compareToIgnoreCase(String str) Compares two strings lexicographically, ignoring case differences.
String	concat(String str) Concatenates the specified string to the end of this string.
boolean	contains(CharSequence s) Returns true if and only if this string contains the specified sequence of char values.
boolean	contentEquals(CharSequence cs) Compares this string to the specified CharSequence.
boolean	contentEquals(StringBuffer sb) Compares this string to the specified StringBuffer.
static String	copyValueOf(char[] data)

← This looks promising

CharSequence?

```
public final class String  
extends Object  
implements Serializable, Comparable<String>, CharSequence
```

Basically, this says that
“CharSequence” is a
kind of String



boolean

contains(CharSequence s)

Returns true if and only if this string contains the specified sequence of char values.

Ok, maybe using the official docs isn't so easy...
(but it should make more sense later)

JAVA STYLE

- No indent character allowed
- Pressing indent = 2 spaces
 - (vim and emacs should do this)
- 80 characters per line max
- Good comments
- Google's Java style guide has much

more:

[google.github.io/styleguide/](https://google.github.io/styleguide/javaguide.html)

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```
CS11TurtleGraphics myTurtle
myTurtle.setPenWidth(PEN_WIDTH);
myTurtle.setPenColor(PEN_COLOR);

// Line1: CSE11WXX
x = startX1;
y = startY1;
myTurtle.drawC(x, y);
```

Sublime and Notepad++ can visually show spaces

```
public class Hello {$
^Ipublic static void main(String[] args){$
^I^ISystem.out.println("Hello World");$
^I}$
```

“:set list” in vim reveals if there are tabs (tab = ^I)

Good comments

```
//Write out one line to the file  
//Each line is a list of values separated by commas  
for (int i = 0; i < values.length; i++) {  
    file.write(Double.toString(values[i]).getBytes());  
    if (i < values.length - 1)  
        file.write(", ".getBytes());  
}  
file.write("\n".getBytes());
```

You can get an idea of what it does without really reading the code

Bad comments

```
for (int i = 0; i < values.length; i++) {  
    file.write(Double.toString(values[i]).getBytes());  
    if (i < values.length - 1)  
        file.write(", ".getBytes()); //write comma  
}  
file.write("\n".getBytes());
```



Homework 2

- `turnToFace()` and `moveTo()` can be super useful
 - Instead of calculating angles, just tell it the exact point to go next
- No magic constants, e.g. `turn(83)`
 - instead do something like:

```
int w_angle = 83;  
turn(w_angle);
```
- Constants often repeat themselves so it's not so bad

Compiling

```
javac -cp turtleClasses.jar:. CS11TurtleGraphics.java  
java -cp turtleClasses.jar:. CS11TurtleGraphics
```

- -cp: “classpath”, search for libraries here
- turtleClasses.jar:. search in “turtleClasses.jar” and “.” (current directory)

Questions

Turtle graphics fun

