

Java System: Command Line Arguments

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Command-line Arguments

- You can pass 0, 1 or more command-line arguments to a Java program

```
>java Main
```

```
>java Main arg1
```

```
>java Main arg1 arg2
```

```
>java Main arg1 arg2 arg3 ...
```

Command-line Arguments

- The arguments must be separated by space.
- If one of the arguments contain a space (a string containing spaces), then you must surround it with double quotes.
- The program accesses these arguments through ***(String[] args)*** included in every main

```
java static void main(String[] args)
```

Command-line Arguments

```
>java Main 1 string "string string"
```

args[0]

args[1]

args[2]

Not an
argument

Command-line Arguments

```
// JAVA
public static void main(String[] args) {
    String msg = String.format("Passed %d arguments. These are: %s", args.length, Arrays.toString(args));
    System.out.println(msg);
}
```

Command-line Arguments

```
// JAVA
public static void main(String[] args) {
    String msg = String.format("Passed %d arguments. These are: %s", args.length, Arrays.toString(args));
    System.out.println(msg);
}
```

PYTHON

```
import sys
msg = 'Passed %d arguments. These are: %s' % (len(sys.argv), sys.argv)
print(msg)
```

Command-line Arguments

- You can access individual arguments using indices or by iterating through *argv*.

```
>java Main 1 string "string string"
```

```
public static void main(String[] args) {  
    for (String arg : args) {  
        System.out.println(arg);  
    }  
    for (int i = 0; i < args.length; i++) {  
        System.out.println(args[i]);  
    }  
}
```



```
1  
string  
string string
```



```
1  
string  
string string
```

Errors

Command-line Arguments

- To ensure that an argument quantity is valid check length:

```
>java Main "New Argument"
```

```
public static void main(String[] args) {  
    if (args.length != 1) {  
        System.err.println("Invalid number of arguments!");  
        System.exit(1);  
    } else {  
        String arg = args[0];  
        System.out.println("Received: " + arg);  
    }  
}
```

→ One argument is expected

Onward to ... Files.

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