

## Running Java with a Library File

One of the optional things you can do for the second assignment – just to make it easier to spot errors in your output – is use the `difference()` method from the `StringUtils` class, part of the *Apache Project Commons* package. The library is included in the resource pack which you can (and actually must) download to attempt the coursework. However, you need to know how to run your code with a library to make use of it. The library itself is a `.jar` file – a *Java Archive* – which is a convenient way of packaging up a (potentially large) number of Java class files. However, we need to take some steps to make sure it works.

### Prepare AutoTest

First thing you need to do is uncomment the code in `AutoTest.java` which uses the library before you compile it.

### Command Line

To run your code with the library from the command line you need to type

```
java -cp .;common-lang3.jar AutoTest.java
```

on Windows, or

```
java -cp .:common-lang3.jar AutoTest.java
```

on a Mac/Linux – the only difference between the two is that on a Mac you use a `:` and on Windows a `;`

### What is going on?

`-cp` specifies the class path – the places Java looks for code – `.` is the current directory, and the other part is obviously the name of the `.jar` file.

### Netbeans and Eclipse

See the videos in the 'How To' sections on Blackboard.