

JARs (Java Archives)

- Used to package a collection of files/directories together
 - If it is to be an executable package, it must include a “manifest” file that specifies the class whose main method is to be executed.
- Packing files

```
jar cvfM jarFile file1 file2 file3 dir1 dir2          // Precludes a manifest file
jar cvfm jarFile manifestFile file1 file2 file3 dir1 dir2
```
- Unpacking files

```
jar xvf jarFile
```
- Manifest file: used to create a executable jar file
 - The contents specifies the class path to the main method to be executed.
e.g., bankManifestFile.mf
Main-Class: startup/Startup
Warning: the (last) line must end with a new line or carriage return.
- Executing a jar file:

```
java -jar jarFile
```
- Using Eclipse to create a JAR file: select the project; Export; Java; JAR file;
Include class files **and source files**, and export destination.
On the third page, specify the main class for manifest file.