

## Assignment 3

In this problem we will practice file input and output.

### Part1:

Write a program that given a list of files (names) and the destination (all through command line input as executing the program), it will copy all those files into the destination folder.

**Note:** if a specified path is a directory, mention that it is a directory, and skip copying it.

**Note:** handle all the possible exceptional cases and user error.

**Note:** every time a file is copied, print the number of bytes copied.

**Example:** if file size is 36 bytes, print 36 B.

if file size is 3635 bytes, print 4 KB.

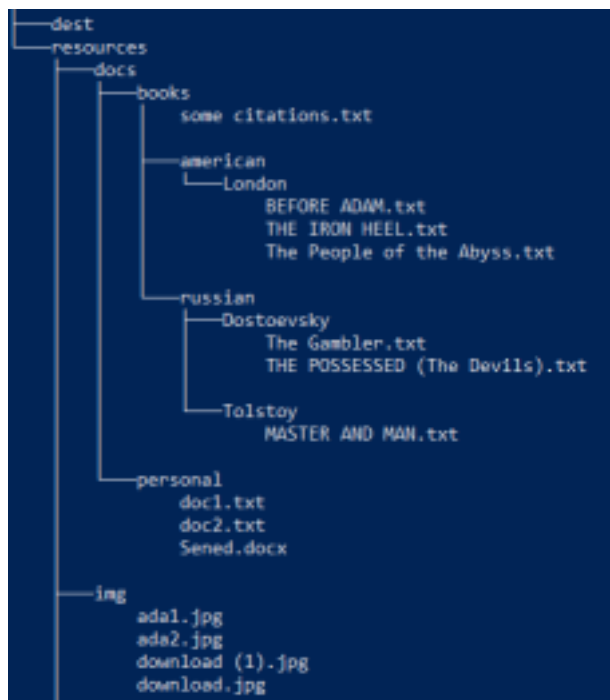
if file size is 3635124 bytes, print 4 MB.

### Part2:

Given a list of directories and files followed by the destination copy all these directories(recursively) and files into the destination.

**Note:** all the subdirectories and files inside the given directories must be kept in the same nested structure in destination folder.

Assume that the folder structure is as following: (use **tree /F** command to see the directory structure recursively, just **tree** on Mac or Linux)



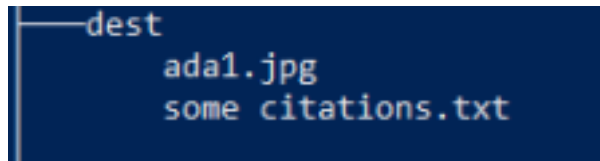
## Part1:

### Executing

```
java YourAppName "resources/img/ada1.jpg" "resources/docs/books/some citations.txt"
```

### Output:

```
>Started: resources\img\ada1.jpg...  
>Finished FILE: resources\img\ada1.jpg  
>Total 11KB were copied!  
>Started: resources\docs\books\some citations.txt...  
>Finished FILE: resources\docs\books\some citations.txt  
>Total 435B were copied!
```



```
dest  
  ada1.jpg  
  some citations.txt
```

**Produces a (dest) folder structure:**

**Note:** as

you see, only the specified file(s) (not their paths) are created in the destination folder.

## Part2:

### Executing

```
java YourAppName "resources/docs/books" "resources/docs/books/some citations.txt" dest
```

**Output:** [Note that every nested folder and its contents are printed with one more indentation]

```

>Started: resources\docs\books...
>Started: resources\docs\books\american...
>Started: resources\docs\books\american\London...
>Started: resources\docs\books\american\London\BEFORE ADAM.txt... >Finished FILE:
resources\docs\books\american\London\BEFORE ADAM.txt >Total 229KB were copied!
>Started: resources\docs\books\american\London\THE IRON HEEL.txt... >Finished FILE:
resources\docs\books\american\London\THE IRON HEEL.txt >Total 528KB were copied!
>Started: resources\docs\books\american\London\The People of the Abyss.txt... >Finished FILE:
resources\docs\books\american\London\The People of the Abyss.txt >Total 370KB were copied!
>Finished FOLDER: resources\docs\books\american\London

>Finished FOLDER: resources\docs\books\american

>Started: resources\docs\books\russian...
>Started: resources\docs\books\russian\Dostoevsky...
>Started: resources\docs\books\russian\Dostoevsky\The Gambler.txt... >Finished FILE:
resources\docs\books\russian\Dostoevsky\The Gambler.txt >Total 357KB were copied!
>Started: resources\docs\books\russian\Dostoevsky\THE POSSESSED (The Devils).txt... >Finished FILE:
resources\docs\books\russian\Dostoevsky\THE POSSESSED (The Devils).txt >Total 2MB were copied!
>Finished FOLDER: resources\docs\books\russian\Dostoevsky

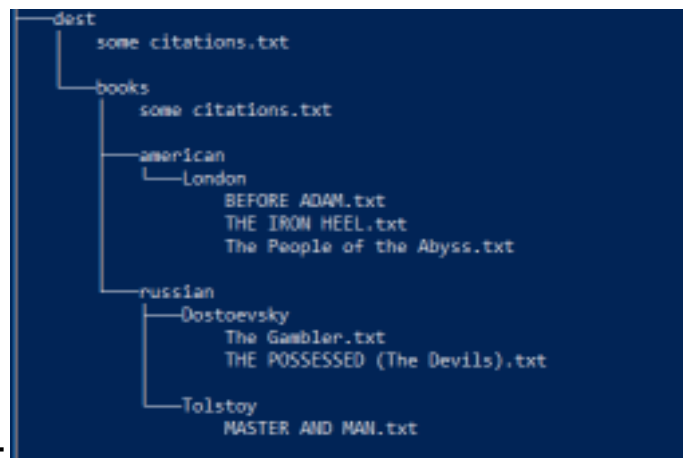
>Started: resources\docs\books\russian\Tolstoy...
>Started: resources\docs\books\russian\Tolstoy\MASTER AND MAN.txt... >Finished FILE:
resources\docs\books\russian\Tolstoy\MASTER AND MAN.txt >Total 127KB were copied!
>Finished FOLDER: resources\docs\books\russian\Tolstoy

>Finished FOLDER: resources\docs\books\russian

>Started: resources\docs\books\some citations.txt...
>Finished FILE: resources\docs\books\some citations.txt
>Total 435B were copied!
>Finished FOLDER: resources\docs\books

>Started: resources\docs\books\some citations.txt...
>Finished FILE: resources\docs\books\some citations.txt
>Total 435B were copied!

```



**Produces a (dest) folder structure:**