

HW 2: Copy a Directory

Instructor: Prof. Seokin Hong

Assigned: September 16, 2018

Due: 11:59pm September 23, 2018

- Extend the `cp1.c` program so that it accepts two directory names (source and target) as arguments and copies all files in the source directory into the target directory.
 - Functional requirement
 - Copy all files contained in the source directory into the target directory.
 - The name of the copied files must be the same as the original file name.
 - If the source directory contains non-readable files (no read permission), the program does not copy the files.
 - If the source directory contains subdirectories, the program terminates after printing an error message.

[Assumption]

// 1. Your code name is `hw2_studentID.c` (example: `hw2_2014123123.c`)

[How to evaluate your code]

// compile your code

```
$gcc hw2_2014123123.c -o hw2
```

// unzip `hw2dir.tar.gz`

```
$ tar xvf hw2dir.tar.gz
```

```
$ cd hw2dir
```

```
$ls ./dir1
```

```
a b c d
```

```
$ ./hw2 ./dir1 ./tdir1
```

```
$ ls ./tdir1
```

```
a b c d
```

```
$ls ./dir2
```

```
-rw-rw-r--. 1 seokin seokin 2746 Sep 16 18:17 d  
--w--w----. 1 seokin seokin 150 Sep 16 18:17 c  
-rw-rw-r--. 1 seokin seokin 848 Sep 16 18:17 b  
-rw-rw-r--. 1 seokin seokin 266 Sep 16 18:18 a  
drwxrwxr-x. 8 seokin seokin 4096 Sep 16 18:19 ..  
drwxrwxr-x. 2 seokin seokin 4096 Sep 16 18:18 .
```

```
$./hw2 ./dir2 ./tdir2
```

```
$ls ./tdir2
```

```
a b d
```

```
$ls ./dir3
```

```
drwxrwxr-x. 3 seokin seokin 4096 Sep 16 18:19 .  
drwxrwxr-x. 8 seokin seokin 4096 Sep 16 18:19 ..  
-rw-rw-r--. 1 seokin seokin 266 Sep 16 18:19 a  
-rw-rw-r--. 1 seokin seokin 848 Sep 16 18:19 b  
-rw-rw-r--. 1 seokin seokin 150 Sep 16 18:19 c  
-rw-rw-r--. 1 seokin seokin 2746 Sep 16 18:19 d  
drwxrwxr-x. 2 seokin seokin 4096 Sep 16 18:19 subdir1
```

```
$ ./hw2 ./dir3 ./tdir3
```

```
[error] There is a subdirectory in the source directory
```

Late Day Policy

All homeworks are due at 11:59pm on the due date. A grading penalty will be applied to late assignments. Any assignment turned in late will be penalized 25% per late day.

Plagiarism

No plagiarism will be tolerated. If the assignment is to be worked on your own, please respect it. If the instructor determines that there are substantial similarities exceeding the likelihood of such an event, he will call the two (or more) students to explain them and possibly to take an immediate test (or assignment, at the discretion of the instructor) to determine the student's abilities related to the offending work.