

Homework 4.4
by Alexander Krupskiy

```
ak@ubuntu01:~$ mkdir ./tmp
ak@ubuntu01:~$ mkdir ./tmp/dir1
ak@ubuntu01:~$ cd ./tmp/dir1/
```

One way:

```
ak@ubuntu01:~/tmp/dir1$ ls -l | tee ./file1.txt
total 0
-rw-rw-r-- 1 ak ak 0 Apr 18 21:02 file1.txt
```

Second way:

```
ak@ubuntu01:~/tmp/dir1$ touch ./file1.txt
ak@ubuntu01:~/tmp/dir1$ ls -l > ./file1.txt
ak@ubuntu01:~/tmp/dir1$ cat ./file1.txt
total 0
-rw-rw-r-- 1 ak ak 0 Apr 18 22:20 file1.txt
```

One way:

```
ak@ubuntu01:~/tmp/dir1$ ls -l | tee ./file2.txt
total 4
-rw-rw-r-- 1 ak ak 52 Apr 18 21:02 file1.txt
-rw-rw-r-- 1 ak ak 0 Apr 18 21:03 file2.txt
```

Second way:

```
ak@ubuntu01:~/tmp/dir1$ touch ./file2.txt
ak@ubuntu01:~/tmp/dir1$ ls -l > ./file2.txt
ak@ubuntu01:~/tmp/dir1$ cat ./file2.txt
total 4
-rw-rw-r-- 1 ak ak 52 Apr 18 22:20 file1.txt
-rw-rw-r-- 1 ak ak 0 Apr 18 22:21 file2.txt
```

```
ak@ubuntu01:~/tmp/dir1$ cmp -b ./file1.txt ./file2.txt
./file1.txt ./file2.txt differ: byte 7, line 1 is 12 ^J 64 4
ak@ubuntu01:~/tmp/dir1$ diff -i ./file1.txt ./file2.txt
1,2c1,3
< total 0
< -rw-rw-r-- 1 ak ak 0 Apr 18 19:16 file1.txt
---
> total 4
> -rw-rw-r-- 1 ak ak 52 Apr 18 19:16 file1.txt
> -rw-rw-r-- 1 ak ak 0 Apr 18 19:29 file2.txt
```

```
ak@ubuntu01:~/tmp/dir1$ CDIR=~+
ak@ubuntu01:~/tmp/dir1$ echo $CDIR
/home/ak/tmp/dir1
ak@ubuntu01:~/tmp/dir1$ cd ~
ak@ubuntu01:~$ cd $CDIR
ak@ubuntu01:~/tmp/dir1$
```

One way:

```
ak@ubuntu01:~/tmp/dir1$ ls -l ~ > ./file3.txt && ls -l ./ >> ./file3.txt  
ak@ubuntu01:~/tmp/dir1$ cat ./file3.txt
```

```
total 28
drwxrwxr-x 3 ak ak 4096 Apr 15 17:59 test
-rw-rw-r-- 1 ak ak 10240 Apr 15 19:55 test.tar
-rw-rw-r-- 1 ak ak 159 Apr 15 19:48 test.tar.gz
-rw-rw-r-- 1 ak ak 168 Apr 15 19:51 test.tar.gzip
drwxrwxr-x 3 ak ak 4096 Apr 18 19:10 tmp
total 12
-rw-rw-r-- 1 ak ak 64 Apr 18 19:37 file1.txt
-rw-rw-r-- 1 ak ak 110 Apr 18 19:49 file2.txt
-rw-rw-r-- 1 ak ak 243 Apr 18 20:01 file3.txt
```

Second way:

```
ak@ubuntu01:~/tmp/dir1$ ls -l ~ | tee ./file3.txt && ls -l ./ | tee -a ./file3.txt
total 28
drwxrwxr-x 3 ak ak 4096 Apr 15 17:59 test
-rw-rw-r-- 1 ak ak 10240 Apr 15 19:55 test.tar
-rw-rw-r-- 1 ak ak 159 Apr 15 19:48 test.tar.gz
-rw-rw-r-- 1 ak ak 168 Apr 15 19:51 test.tar.gzip
drwxrwxr-x 3 ak ak 4096 Apr 18 19:10 tmp
total 12
-rw-rw-r-- 1 ak ak 52 Apr 18 21:02 file1.txt
-rw-rw-r-- 1 ak ak 98 Apr 18 21:03 file2.txt
-rw-rw-r-- 1 ak ak 243 Apr 18 21:07 file3.txt
ak@ubuntu01:~/tmp/dir1$ cat ./file3.txt
total 28
drwxrwxr-x 3 ak ak 4096 Apr 15 17:59 test
-rw-rw-r-- 1 ak ak 10240 Apr 15 19:55 test.tar
-rw-rw-r-- 1 ak ak 159 Apr 15 19:48 test.tar.gz
-rw-rw-r-- 1 ak ak 168 Apr 15 19:51 test.tar.gzip
drwxrwxr-x 3 ak ak 4096 Apr 18 19:10 tmp
total 12
-rw-rw-r-- 1 ak ak 52 Apr 18 21:02 file1.txt
-rw-rw-r-- 1 ak ak 98 Apr 18 21:03 file2.txt
-rw-rw-r-- 1 ak ak 243 Apr 18 21:07 file3.txt
```

```
ak@ubuntu01:~/tmp/dir1$ FIO="Alexander Krupskiy"
```

One way:

```
ak@ubuntu01:~/tmp/dir1$ ARR=($FIO); echo "`whoami` $FIO `tr -d [:cntrl:] <<< ${ARR[0]} | wc -m` | tr -d [:cntrl:]` `tr -d [:cntrl:] <<< ${ARR[1]} | wc -m`"
ak Alexander Krupskiy 9 8
```

Second way:

```
ak@ubuntu01:~/tmp/dir1$ ARR=($FIO); echo "`whoami` $FIO `tr -d [:cntrl:] <<< ${#ARR[0]}`${#ARR[1]}`"
ak Alexander Krupskiy 9 8
```

```
ak@ubuntu01:~/tmp/dir1$ echo -e "${ARR[0]}\t${ARR[1]}"
Alexander Krupskiy
```

```
ak@ubuntu01:~/tmp/dir1$ RND=$(cat /dev/urandom | tr -dc [:alnum:] | fold | head -n 1); echo "Value of variable `cut -f1 --delimiter=' '` <<< ${!RND@}` equals $RND"
Value of variable RND equals
rZ0HQ98W8z01YKQcpEjvxgcuZ6wFENnZg4C4JdVNQ2kxyZo01I0fv5AyDVwmAcxEo8suPVQwJi4IfGPK
```