

## CS 288 2019S Section 102

### Homework 03

**Due:** At the beginning of class on Thursday February 28, 2019.

Using an IDE or Text Editor of your choice, create and save a UNIX Shell file for each problem given. Before submitting your solutions via Moodle, zip the shell scripts and name the archive, if your name is Harry Houdini, for example, HW3\_HarryHoudini.zip. You may use gzip if that's more convenient.

1. Write a shell script, `renumber.sh`, that will rename all the files in a directory. The first argument is a base name, second argument is a file extension. If the script is run as:

```
$ renumber.sh 25thAnniversary jpeg
```

then the resulting files should have names like:

```
25thAnniversary001.jpeg, 25thAnniversary002.jpeg, 25thAnniversary003.jpeg, etc.
```

Before renaming a file, make sure that a file with the new name does not already exist. If one does, handle the exception appropriately.

2. Write a shell script, `count.sh`, which builds an array of counters for the files starting with a digit under a directory given as a command-line argument. For example, if there are 7 files starting with "0", and 3 files starting with "8", your script will print:

```
0 7
1 0
2 0
3 0
4 0
5 0
6 0
7 0
8 3
9 0
```

3. Write a shell script, `motd.sh`, that accepts two command-line arguments: a message to print, and the number of times to print it.

The script should print the message that many times, surrounded by a box of stars. For example, if the script is run in the following way:

```
$ motd.sh "Always remember you are unique, just like everyone else" 5
```

then the script should produce the following output:

```
*****
* Always remember you are unique, just like everyone else *
* Always remember you are unique, just like everyone else *
* Always remember you are unique, just like everyone else *
* Always remember you are unique, just like everyone else *
* Always remember you are unique, just like everyone else *
*****
```