Section A

1.
```
mkdir HW1
cd HW1
wget http://www.gutenberg.org/files/98/98-0.txt -O story.txt
```

2.
```
split story.txt sample_
mkdir subfiles
mv sample_* subfiles
```

3.
```
mkdir subfiles/sample1
mkdir subfiles/sample2
mkdir subfiles/tmp
```

3a.
```
cd subfiles/sample1
echo franklin >.franklin
echo zhao >.zhao
```

3b.
```
ls -a
cat .franklin
cat .zhao
```

3c.
```
cd ../tmp
```
No, because the two "tmp" directories are in different paths. If we want to find the "hidden" directory, we need to go to "/tmp" then list (ls) the files and directories. (the new "tmp" was created in the root directory)

4.
```
tar -cf subfiles.tar sample_*
gzip subfiles.tar
```

304572/(47041+51055+49699+47139+50727+47205+50366+48380+49431+5320
7+49815+52894+48093+49254+46499+49096+14434) = 0.3787
So we just achieved a 37.87% compression.

5.

```
mkdir tar_zip
mv subfiles.tar.gz tar_zip
cd tar_zip
gzip -d subfiles.tar.gz
tar -xf subfiles.tar
```

Retrieve zip files from CentOS7:

```
scp -r -P 1111 fzhao@localhost:HW1/subfiles/tar_zip ~/Desktop
```

Section B

1.

```
vi unixIsAwesome1.txt
```
(press i)
(write the text)
(press <esc>)
```
:wq
```

2.

```
cat unixIsAwesome1.txt > unixIsAwesome2.txt
```

3.

```
cat unixIsAwesome2.txt
```

4.

```
cat -n unixIsAwesome2.txt | head -n -2
```

5.

```
cd subfiles
```

5a.

```
vi sample_aa
```

Reach the end of the file: G$
Reach the top of the file: 1G

5b.

```
head -n30 sample_aa > outputb5b.txt
```

Retrieve outputb5b.txt from CentOS7:

```
Open terminal in Mac, then:
scp -P 1111 fzhao@localhost:HW1/subfiles/outputb5b.txt ~/Desktop/
```

5c.
Approach 1: press <esc> back to the command mode, and then use the following command:

```
:q!
```

Apporach 2: press <esc> back to the command mode, and iteratively press u until there shows "Already at oldest change" at the bottom.

Approach 3: press <esc> back to the command mode, and then use the following command:

```
:e!
```

6.

```
chmod 754 sample_aa
```

7.

```
ping amazon.com
```