**Part 1:**

┌──(kali㉿kali)-[~]

└─$ cd LinuxEight

┌──(kali㉿kali)-[~/LinuxEight]

└─$ ls -l

total 12

-rwxr-xr-x 1 kali kali 96 Oct 27 17:36 Exercise1.sh

-rwxr-xr-x 1 kali kali 480 Oct 27 18:05 MSSQLscanner2.sh

-rwxr-xr-x 1 kali kali 224 Oct 27 18:12 MSSQLscanner.sh

┌──(kali㉿kali)-[~/LinuxEight]

└─$ tar -cvf 701a8.tar Exercise1.sh MSSQLscanner.sh MSSQLscanner2.sh

Exercise1.sh

MSSQLscanner.sh

MSSQLscanner2.sh

┌──(kali㉿kali)-[~/LinuxEight]

└─$ ls -l

total 24

-rw-r--r-- 1 kali kali 10240 Nov 1 15:56 701a8.tar

-rwxr-xr-x 1 kali kali 96 Oct 27 17:36 Exercise1.sh

-rwxr-xr-x 1 kali kali 480 Oct 27 18:05 MSSQLscanner2.sh

-rwxr-xr-x 1 kali kali 224 Oct 27 18:12 MSSQLscanner.sh

┌──(kali㉿kali)-[~/LinuxEight]

└─$ gzip 701a8.\*

┌──(kali㉿kali)-[~/LinuxEight]

└─$ ls -l

total 16

-rw-r--r-- 1 kali kali 592 Nov 1 15:56 701a8.tar.gz

-rwxr-xr-x 1 kali kali 96 Oct 27 17:36 Exercise1.sh

-rwxr-xr-x 1 kali kali 480 Oct 27 18:05 MSSQLscanner2.sh

-rwxr-xr-x 1 kali kali 224 Oct 27 18:12 MSSQLscanner.sh

┌──(kali㉿kali)-[~/LinuxEight]

└─$ mkdir gzip

┌──(kali㉿kali)-[~/LinuxEight]

└─$ cp 701a8.tar.gz ~/LinuxEight/gzip

┌──(kali㉿kali)-[~/LinuxEight]

└─$ cd gzip

┌──(kali㉿kali)-[~/LinuxEight/gzip]

└─$ ls -l

total 4

-rw-r--r-- 1 kali kali 592 Nov 1 16:00 701a8.tar.gz

┌──(kali㉿kali)-[~/LinuxEight/gzip]

└─$ gunzip 701a8.\*

┌──(kali㉿kali)-[~/LinuxEight/gzip]

└─$ tar -xvf 701a8.tar

Exercise1.sh

MSSQLscanner.sh

MSSQLscanner2.sh

┌──(kali㉿kali)-[~/LinuxEight/gzip]

└─$ ls -l

total 24

-rw-r--r-- 1 kali kali 10240 Nov 1 16:00 701a8.tar

-rwxr-xr-x 1 kali kali 96 Oct 27 17:36 Exercise1.sh

-rwxr-xr-x 1 kali kali 480 Oct 27 18:05 MSSQLscanner2.sh

-rwxr-xr-x 1 kali kali 224 Oct 27 18:12 MSSQLscanner.sh

**Part 2:**

┌──(kali㉿kali)-[~/LinuxEight/gzip]

└─$ cd ..

┌──(kali㉿kali)-[~/LinuxEight]

└─$ gunzip 701a8.\*

┌──(kali㉿kali)-[~/LinuxEight]

└─$ ls -l

total 28

-rw-r--r-- 1 kali kali 10240 Nov 1 15:56 701a8.tar

-rwxr-xr-x 1 kali kali 96 Oct 27 17:36 Exercise1.sh

drwxr-xr-x 2 kali kali 4096 Nov 1 16:02 gzip

-rwxr-xr-x 1 kali kali 480 Oct 27 18:05 MSSQLscanner2.sh

-rwxr-xr-x 1 kali kali 224 Oct 27 18:12 MSSQLscanner.sh

┌──(kali㉿kali)-[~/LinuxEight]

└─$ bzip2 701a8.\*

┌──(kali㉿kali)-[~/LinuxEight]

└─$ ls -l

total 20

-rw-r--r-- 1 kali kali 603 Nov 1 15:56 701a8.tar.bz2

-rwxr-xr-x 1 kali kali 96 Oct 27 17:36 Exercise1.sh

drwxr-xr-x 2 kali kali 4096 Nov 1 16:02 gzip

-rwxr-xr-x 1 kali kali 480 Oct 27 18:05 MSSQLscanner2.sh

-rwxr-xr-x 1 kali kali 224 Oct 27 18:12 MSSQLscanner.sh

┌──(kali㉿kali)-[~/LinuxEight]

└─$ mkdir bzip2

┌──(kali㉿kali)-[~/LinuxEight]

└─$ cp 701a8.tar.bz2 ~/LinuxEight/bzip2

┌──(kali㉿kali)-[~/LinuxEight]

└─$ cd bzip2

┌──(kali㉿kali)-[~/LinuxEight/bzip2]

└─$ ls -l

total 4

-rw-r--r-- 1 kali kali 603 Nov 1 16:08 701a8.tar.bz2

┌──(kali㉿kali)-[~/LinuxEight/bzip2]

└─$ bunzip2 701a8.\*

┌──(kali㉿kali)-[~/LinuxEight/bzip2]

└─$ ls -l

total 12

-rw-r--r-- 1 kali kali 10240 Nov 1 16:08 701a8.tar

┌──(kali㉿kali)-[~/LinuxEight/bzip2]

└─$ tar -xvf 701a8.tar

Exercise1.sh

MSSQLscanner.sh

MSSQLscanner2.sh

┌──(kali㉿kali)-[~/LinuxEight/bzip2]

└─$ ls -l

total 24

-rw-r--r-- 1 kali kali 10240 Nov 1 16:08 701a8.tar

-rwxr-xr-x 1 kali kali 96 Oct 27 17:36 Exercise1.sh

-rwxr-xr-x 1 kali kali 480 Oct 27 18:05 MSSQLscanner2.sh

-rwxr-xr-x 1 kali kali 224 Oct 27 18:12 MSSQLscanner.sh

The file compressed with gzip was 592 and with bzip2 it was 603, I know in our textbook it says that bzip2 is the slowest, but the resultant files are the smallest and gzip falls in the middle. I think that the comparable size seen between the two is because the files are quite small so there is a meager difference. The comparison between the two using larger files would most likely show the correct size difference compared to the files that I am using from Linux Assignment 7.

**Part 3:**

┌──(kali㉿kali)-[~/LinuxEight/bzip2]

└─$ cd ..

┌──(kali㉿kali)-[~/LinuxEight]

└─$ ls -l

total 24

-rw-r--r-- 1 kali kali 603 Nov 1 15:56 701a8.tar.bz2

drwxr-xr-x 2 kali kali 4096 Nov 1 16:08 bzip2

-rwxr-xr-x 1 kali kali 96 Oct 27 17:36 Exercise1.sh

drwxr-xr-x 2 kali kali 4096 Nov 1 16:02 gzip

-rwxr-xr-x 1 kali kali 480 Oct 27 18:05 MSSQLscanner2.sh

-rwxr-xr-x 1 kali kali 224 Oct 27 18:12 MSSQLscanner.sh

┌──(kali㉿kali)-[~/LinuxEight]

└─$ bunzip2 701a8.\*

┌──(kali㉿kali)-[~/LinuxEight]

└─$ ls -l

total 32

-rw-r--r-- 1 kali kali 10240 Nov 1 15:56 701a8.tar

drwxr-xr-x 2 kali kali 4096 Nov 1 16:08 bzip2

-rwxr-xr-x 1 kali kali 96 Oct 27 17:36 Exercise1.sh

drwxr-xr-x 2 kali kali 4096 Nov 1 16:02 gzip

-rwxr-xr-x 1 kali kali 480 Oct 27 18:05 MSSQLscanner2.sh

-rwxr-xr-x 1 kali kali 224 Oct 27 18:12 MSSQLscanner.sh

┌──(kali㉿kali)-[~/LinuxEight]

└─$ compress 701a8.\*

┌──(kali㉿kali)-[~/LinuxEight]

└─$ ls -l

total 24

-rw-r--r-- 1 kali kali 898 Nov 1 15:56 701a8.tar.Z

drwxr-xr-x 2 kali kali 4096 Nov 1 16:08 bzip2

-rwxr-xr-x 1 kali kali 96 Oct 27 17:36 Exercise1.sh

drwxr-xr-x 2 kali kali 4096 Nov 1 16:02 gzip

-rwxr-xr-x 1 kali kali 480 Oct 27 18:05 MSSQLscanner2.sh

-rwxr-xr-x 1 kali kali 224 Oct 27 18:12 MSSQLscanner.sh

┌──(kali㉿kali)-[~/LinuxEight]

└─$ mkdir compress

┌──(kali㉿kali)-[~/LinuxEight]

└─$ cp 701a8.tar.Z ~/LinuxEight/compress

┌──(kali㉿kali)-[~/LinuxEight]

└─$ cd compress

┌──(kali㉿kali)-[~/LinuxEight/compress]

└─$ ls -l

total 4

-rw-r--r-- 1 kali kali 898 Nov 1 16:15 701a8.tar.Z

┌──(kali㉿kali)-[~/LinuxEight/compress]

└─$ uncompress 701a8.\*

┌──(kali㉿kali)-[~/LinuxEight/compress]

└─$ tar -xvf 701a8.tar

Exercise1.sh

MSSQLscanner.sh

MSSQLscanner2.sh

┌──(kali㉿kali)-[~/LinuxEight/compress]

└─$ ls -l

total 24

-rw-r--r-- 1 kali kali 10240 Nov 1 16:15 701a8.tar

-rwxr-xr-x 1 kali kali 96 Oct 27 17:36 Exercise1.sh

-rwxr-xr-x 1 kali kali 480 Oct 27 18:05 MSSQLscanner2.sh

-rwxr-xr-x 1 kali kali 224 Oct 27 18:12 MSSQLscanner.sh

The file that used compress should be the largest but fastest method of compression, which is seen in my example with the size of 898 bytes. When compared to gzip and bzip2, compress resulted in the largest file size.