

Anisha Aggarwal  
DuckID: anishaa  
File: report.pdf

- 1) This is how I compiled and linked my program:

```
make clean  
make
```

- 2) I created a uspsin.txt file to run my program against

```
./cpubound -minutes 1  
./iobound -minutes 1
```

- 3) Then I tested my program with uspsin.txt:

```
./uspsv1 --quantum=200 uspsin.txt  
./uspsv2 --quantum=200 uspsin.txt  
./uspsv3 --quantum=200 uspsin.txt  
./uspsv4 --quantum=200 uspsin.txt
```

- 4) Then I tested my program manually with commands such as:

```
ls -l  
ps -a  
sleep 1  
cat uspsin.txt
```

- 5) Then I ran valgrind to ensure no memory leaks:

```
valgrind ./uspsv1 --quantum=200 uspsin.txt --leak-check=yes  
valgrind ./uspsv2 --quantum=200 uspsin.txt --leak-check=yes  
valgrind ./uspsv3 --quantum=200 uspsin.txt --leak-check=yes  
valgrind ./uspsv4 --quantum=200 uspsin.txt --leak-check=yes
```