

### TEST 1

Running TEST1 for 10000 inputs  
Creating 10000 uids took 10 ms.  
adding 10000 records took 5 ms.  
deleting 10000 records took 297 ms.  
TEST-1 successful

./test1 100000

Running TEST1 for 100000 inputs  
Creating 100000 uids took 1059 ms.  
adding 100000 records took 111 ms.  
deleting 100000 records took 153091 ms.  
TEST-1 successful

### TEST 2

Running TEST2 for 100000 inputs  
Creating 100000 uids took 481 ms.  
adding 100000 records took 40 ms.  
linear search 20000 records took 7812 ms.  
quick sort 100000 records took 40 ms.  
binary search 100000 records took 64 ms.  
inserting 100000 records took 74 ms.  
merge sort 100000 records took 66 ms.  
binary search 100000 records took 62 ms.  
inserting 20000 records took 7 ms.  
Creating 100000 uids took 355 ms.  
adding 100000 records took 79 ms.  
linear search 20000 records took 23992 ms.  
quick sort 100000 records took 188 ms.  
binary search 100000 records took 900 ms.  
TEST-3 successful

### TEST 3

./test3 1000000

Running TEST3 for 1000000 inputs  
Creating 1000000 uids took 11241 ms.  
adding 1000000 records took 367 ms.  
linear search 20000 records took 254282 ms.  
quick sort 1000000 records took 16662 ms.  
binary search 1000000 records took 64042 ms.  
TEST-3 successful

P.T.O

```
root@KRISHNA:/mnt/c/Users/kriis/Downloads/DSALAB-master/PA1# make submit1
gcc -g -Werror -shared -O3 -fPIC -o libpa1.so pa1.c
echo "Compiling test-case 1"
Compiling test-case 1
gcc -g -Werror -O3 -L. -Wl,-rpath=. -o test1 test1.c -ldsa -lpa1 -lm
./test1 10000

Running TEST1 for 10000 inputs
Creating 10000 uids took 10 ms.
adding 10000 records took 5 ms.
deleting 10000 records took 297 ms.
TEST-1 successful
./test1 100000

Running TEST1 for 100000 inputs
Creating 100000 uids took 1059 ms.
adding 100000 records took 111 ms.
deleting 100000 records took 153091 ms.
TEST-1 successful

root@KRISHNA:/mnt/c/Users/kriis/Downloads/DSALAB-master/PA1# make submit2
gcc -g -Werror -shared -O3 -fPIC -o libpa1.so pa1.c
echo "Compiling test-case 2"
Compiling test-case 2
gcc -g -Werror -O3 -L. -Wl,-rpath=. -o test2 test2.c -ldsa -lpa1 -lm
./test2 100000

Running TEST2 for 100000 inputs
Creating 100000 uids took 481 ms.
adding 100000 records took 40 ms.
linear search 20000 records took 7812 ms.
quick sort 100000 records took 40 ms.
binary search 100000 records took 64 ms.
inserting 100000 records took 74 ms.
merge sort 100000 records took 66 ms.
binary search 100000 records took 62 ms.
inserting 20000 records took 7 ms.
inserting 20000 records took 7 ms.
```

```
Compiling test-case 2
gcc -g -Werror -O3 -L. -Wl,-rpath=. -o test2 test2.c -ldsa -lpa1 -lm
./test2 100000

Running TEST2 for 100000 inputs
Creating 100000 uids took 481 ms.
adding 100000 records took 40 ms.
linear search 20000 records took 7812 ms.
quick sort 100000 records took 40 ms.
binary search 100000 records took 64 ms.
inserting 100000 records took 74 ms.
merge sort 100000 records took 66 ms.
binary search 100000 records took 62 ms.
inserting 20000 records took 7 ms.
Creating 100000 uids took 355 ms.
adding 100000 records took 79 ms.
linear search 20000 records took 23992 ms.
quick sort 100000 records took 188 ms.
binary search 100000 records took 900 ms.
TEST-3 successful
./test3 1000000

Running TEST3 for 1000000 inputs
Creating 1000000 uids took 11241 ms.
adding 1000000 records took 367 ms.
linear search 20000 records took 254282 ms.
quick sort 1000000 records took 16662 ms.
binary search 1000000 records took 64042 ms.
TEST-3 successful

root@KRISHNA:/mnt/c/Users/kriis/Downloads/DSALAB-master/PA1#
```