```
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 OS$ gcc os5stat.c
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 OS$ ./a.out

Size of file = 509
```

```
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 OS$ gcc os4execlp.c
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 OS$ ./a.out

Parent process gets executed

Child process gets executed
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 OS$
```

```
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 OS$ gcc os3withWait.c
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 OS$ ./a.out

Parent PID: 8004
Waiting for child process to execute:

Child PID: 8005
Child PPID: 8004
Child process was succesfully executed!
```

```
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 OS$ gcc -o hi os2withoutWait.c
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 OS$ ./hi

Parent process gets executed

Child process gets executed
```

```
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 OS$ gcc os1fork.c
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 OS$ ./a.out

Hello World

Hello World

Hello World

Hello World
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 OS$
Hello World

Hello World

Hello World

Hello World
z
z: command not found
```

```
noelmathen@MATHEN:~/Desktop/LAB WORKS$ cd "/home/noelmathen/Desktop/LAB WORKS/S4 DAA/LAB CODES/" && gcc timeSpaceTradeOff.c -o timeSpaceTradeOff && "
/home/noelmathen/Desktop/LAB WORKS/S4 DAA/LAB CODES/"timeSpaceTradeOff

Enter the number of elements in the array/list: 100
The randomy generated array/list is:
Enter the position of element you want to delete: 10

The next largest element after 62(deleted element) is: 63

Time take for deletion in array                         : 0.000001
Time take for deletion in linked list                   : 0.000000
Time take for finding the next largest element in array  : 0.000001
Time take for finding the next largest element in linked list : 0.000001
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 DAA/LAB CODES$ cd "/home/noelmathen/Desktop/LAB WORKS/S4 DAA/LAB CODES/" && gcc timeSpaceTradeOff.c -o timeS
paceTradeOff && "/home/noelmathen/Desktop/LAB WORKS/S4 DAA/LAB CODES/"timeSpaceTradeOff

Enter the number of elements in the array/list: 1000
The randomy generated array/list is:
Enter the position of element you want to delete: 100

The next largest element after 95(deleted element) is: 96

Time take for deletion in array                         : 0.000007
Time take for deletion in linked list                   : 0.000002
Time take for finding the next largest element in array  : 0.000044
Time take for finding the next largest element in linked list : 0.000009
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 DAA/LAB CODES$ cd "/home/noelmathen/Desktop/LAB WORKS/S4 DAA/LAB CODES/" && gcc timeSpaceTradeOff.c -o timeS
paceTradeOff && "/home/noelmathen/Desktop/LAB WORKS/S4 DAA/LAB CODES/"timeSpaceTradeOff

Enter the number of elements in the array/list: 10000
The randomy generated array/list is:
Enter the position of element you want to delete: 1000

The next largest element after 93(deleted element) is: 94

Time take for deletion in array                         : 0.000050
Time take for deletion in linked list                   : 0.000004
Time take for finding the next largest element in array  : 0.000033
Time take for finding the next largest element in linked list : 0.000080
```

```
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 DAA/LAB CODES$ cd "/home/noelmathen/Desktop/LAB WORKS/S4 DAA/LAB CODES/" && gcc timeSpaceTradeOff.c -o timeS
paceTradeOff && "/home/noelmathen/Desktop/LAB WORKS/S4 DAA/LAB CODES/"timeSpaceTradeOff

Enter the number of elements in the array/list: 100000
The randomy generated array/list is:
Enter the position of element you want to delete: 10000

The next largest element after 37(deleted element) is: 38

Time take for deletion in array                         : 0.000528
Time take for deletion in linked list                   : 0.000036
Time take for finding the next largest element in array  : 0.000655
Time take for finding the next largest element in linked list : 0.001159
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 DAA/LAB CODES$ cd "/home/noelmathen/Desktop/LAB WORKS/S4 DAA/LAB CODES/" && gcc timeSpaceTradeOff.c -o timeS
paceTradeOff && "/home/noelmathen/Desktop/LAB WORKS/S4 DAA/LAB CODES/"timeSpaceTradeOff

Enter the number of elements in the array/list: 1000000
The randomy generated array/list is:
Enter the position of element you want to delete: 100000

The next largest element after 42(deleted element) is: 43

Time take for deletion in array                         : 0.003999
Time take for deletion in linked list                   : 0.000827
Time take for finding the next largest element in array  : 0.005628
Time take for finding the next largest element in linked list : 0.010351
noelmathen@MATHEN:~/Desktop/LAB WORKS/S4 DAA/LAB CODES$
```