```
The array:
383 886
862 123
                                         649
69
305
403
                          335
802
170
178
                                    492
58
281
584
                                                   362
393
84
754
                                                              690
11
336
932
                                                                                        426
919
857
12
                                                         27
456
327
399
                                                                             926
373
729
368
                                                                                             172
784
124
226
                                                                                                        211
198
582
94
element deleted is 782
The time taken for deletion is: 0.000023000000000s
The next largest element: 784
The time taken for next largest element is: 0.0000100000000000
                  90:~$ gcc array.c
90:~$ ./a.out
Enter number of elements in an array: 1000
Enter position of element to be removed:250
element deleted is 810
The time taken for deletion is: 0.000029000000000
The next largest element: 811
The time taken for next largest element is: 0.0000220000000000
s4csbs@rajagiri-OptiPlex-5090:~$ ./a.out
Enter number of elements in an array: 10000
Enter position of element to be removed:2500
element deleted is 131
The time taken for deletion is: 0.000080000000000s
The next largest element: 132
The time taken for next largest element is: 0.0001480000000000
s4csbs@rajagiri-OptiPlex-5090:~$ ./a.out
Enter number of elements in an array: 100000
Enter position of element to be removed:25000
element deleted is 416
The time taken for deletion is: 0.000448000000000s
The next largest element: 417
The time taken for next largest element is: 0.002393000000000s
s4csbs@rajagiri-OptiPlex-5090:~$ ./a.out
Enter number of elements in an array: 1000000
Enter position of element to be removed:250000
element deleted is 771
The time taken for deletion is: 0.003983000000000s
The next largest element: 772
The time taken for next largest element is: 0.013295000000000s
```

```
s4csbs@rajagiri-OptiPlex-5090:~$ gcc linked.c
s4csbs@rajagiri-OptiPlex-5090:~$ ./a.out
 MENU
1.Insert
2.Display
3.Delete
4.Next largest
5.Exit
Enter choice:1
Enter no. of elements:100
  MENU
2.Display
3.Delete
4.Next largest
5.Exit
Enter choice:2
                                  777
67
956
87
                                                   915
135
873
808
               886
123
980
750
                                                                                                                                                         421
167
925
651
                                                                                                                                                                                                                                                                                                  426
919
857
12
                                                                                                                                                                                                                                                                                                                                                     211
198
582
94
 383
862
                                                                                      335
                                                                                                       386
                                                                                                                        492
                                                                                                                                        649
                                                                                                                                                                           362
393
84
754
                                                                                                                                                                                            27
456
327
399
                                                                                                                                                                                                            690
11
336
932
                                                                                                                                                                                                                              59
42
505
60
                                                                                                                                                                                                                                               763
229
846
676
                                                                                                                                                                                                                                                                926
373
729
368
                                                                                                                                                                                                                                                                                                                   172
784
124
226
                                                                                                                                                                                                                                                                                                                                    736
537
895
586
                                                                    929
862
276
                                                                                      802
170
178
                                                                                                      22
996
788
                                                                                                                        58
281
584
                                                                                                                                        69
305
403
                                                                                                                                                                                                                                                                                 421
313
739
 1.Insert
 2.Display
3.Delete
 4.Next largest
5.Exit
 Enter choice:3
 Enter postion of data (starting from 0):
23
Element deleted is 530
The time taken for deletion is: 0.0000080000000000
```

```
1.Insert
2.Display
3.Delete
4.Next largest
5.Exit
 The next greatest element in the list is : 537
The time taken for next largest element is: 0.0000280000000000
MENU
1.Insert
2.Display
2.Usplay
3.Delete
4.Next largest
5.Exit
Enter choice:1
Enter no. of elements:1000
MENU
 1.Insert
2.Display
3.Delete
4.Next largest
5.Exit
Enter choice:3
Enter postion of data (starting from 0):
250
250
Element deleted is 801
The time taken for deletion is: 0.000010000000000
MENU
1.Insert
2.Display
3.Delete
4.Next largest
5.Exit
Enter choice:4
 Enter choice:4
The next greatest element in the list is : 802
The time taken for next largest element is: 0.0000600000000000
 MENU
1.Insert
2.Display
2.01sptay
3.Delete
4.Next largest
5.Exit
Enter choice:1
Enter no. of elements:10000
```

```
Enter choice:3
Enter postion of data (starting from 0):
25000
Element deleted is 186
The time taken for deletion is: 0.0002660000000008
MENU
1.Insert
2.Display
3.Delete
4.Next largest
5.Exit
Enter choice:4
The next greatest element in the list is: 187
The time taken for next largest element is: 0.00324700000000008
MENU
1.Insert
2.Display
3.Delete
4.Next largest
5.Exit
Enter choice:1
Enter no. of elements:1000000
MENU
1.Insert
2.Display
3.Delete
4.Next largest
5.Exit
Enter postion of data (starting from 0):
250000
Element deleted is 272
The time taken for deletion is: 0.0026200000000008
MENU
1.Insert
2.Display
3.Delete
4.Next largest
5.Exit
Enter choice:3
Enter postion of data (starting from 0):
250000
Element deleted is 272
The time taken for deletion is: 0.00262000000000008
MENU
1.Insert
2.Display
3.Delete
4.Next largest
5.Exit
Enter choice:4
The time taken for next largest element is: 0.0137620000000000
MENU
1.Insert
2.Display
3.Delete
4.Next largest
5.Exit
Enter choice:4
The time taken for next largest element is: 0.013762000000000008
MENU
1.Insert
2.Display
3.Delete
4.Next largest
5.Exit
Enter choice:5
Enter choice:5
```