```cpp
 1 #include <bits/stdc++.h>
 2 using namespace std;
 3
 4 void fcfs()
 5 {
 6
 7     int n, head, i, j, k, seek = 0,diff;
 8     float avg;
 9
10     cout<<"\nEnter the size of queue request :";
11     cin>>n;
12
13     int queue[n + 1];
14
15     cout<<"\nEnter the queue :";
16     for (i = 1; i <= n; i++)
17     {
18         cin>>queue[i];
19     }
20
21     printf("\nEnter the initial head position :");
22     cin>>head;
23     cout<<endl;
24     queue[0] = head;
25
26     for (j = 0; j <= n - 1; j++)
27     {
28         diff = abs(queue[j + 1] - queue[j]);
29         seek += diff;
30         printf("move is from %d to %d with seek %3d\n", queue[j], queue[j + 1],
   diff);
31     }
32     cout<<"\n";
33     printf("Total seek time is : %d\n", seek);
34     avg = seek / (float)n;
35
36     printf("Average seek time is : %f\n", avg);
37 }
38
39 void sstf()
40 {
41
42     int head;
43     printf("\nEnter head position: ");
44     cin >> head;
45
46     int n, i;
47     cout << "\nEnter total requests" << endl;
48     cin >> n;
49     int queue1[n], done[n];
50     printf("\nEnter requests: ");
51     for (i = 0; i < n; i++)
52     {
53         cin>>queue1[i];
54         done[i] = 0;
55     }
56
57     printf("%d->", head);
58
59     int temp1 = head;
60     int count1 = 0, j, sum = 0;
```

```cpp
61      while (count1 != n)
62      {
63          int temp = 100000;
64          int k = -1;
65          for (j = 0; j < n; j++)
66          {
67              if (temp1 != queue1[j] && done[j] == 0)
68              {
69                  if (temp > abs(temp1 - queue1[j]))
70                  {
71                      temp = abs(temp1 - queue1[j]);
72                      k = j;
73                  }
74              }
75          }
76          sum += temp;
77          printf("%d->", queue1[k]);
78          count1++;
79          temp1 = queue1[k];
80          done[k] = 1;
81          // cout<<temp1<<endl;
82      }
83      cout << endl;
84      cout << "Total head movement is=" << sum << endl;
85      cout << "Average head movement is=" << sum/float(n) << endl;
86
87  }
88
89  int main()
90  {
91      cout<<"\n";
92      cout << "Enter 1 for FCFS and 2 for SSTF" << endl;
93      cout << "\n";
94      int choice;
95      cin >> choice;
96      if (choice == 1)
97      {
98          fcfs();
99      }
100     else if (choice == 2)
101     {
102         sstf();
103     }
104     else
105     {
106         cout << "Wrong Choice" << endl;
107     }
108     return 0;
109 }
```