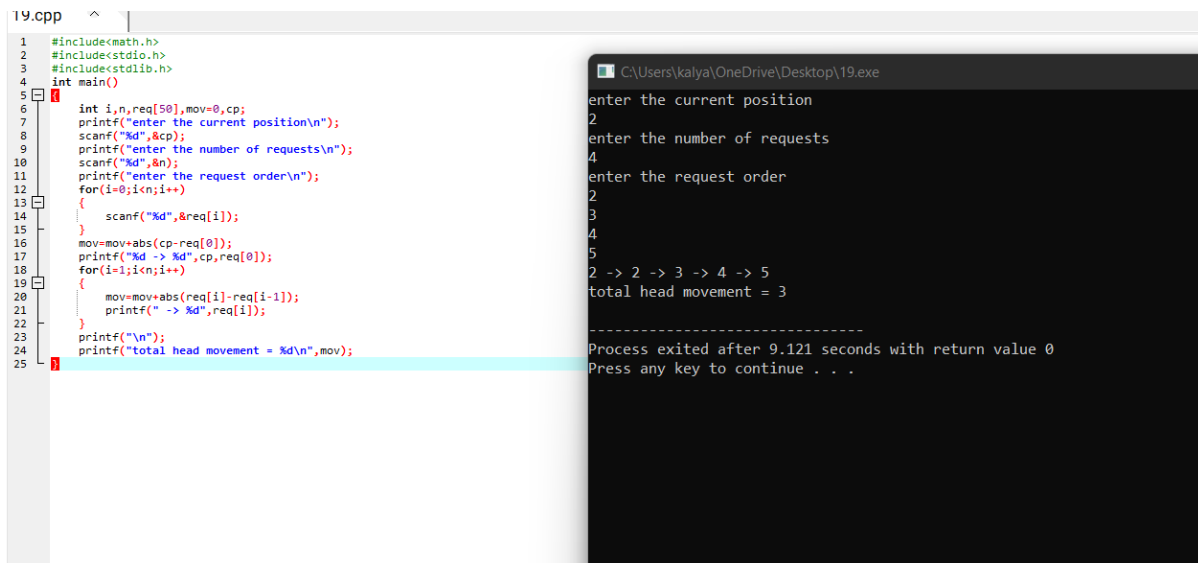


22. Construct a C program to simulate the First Come First Served disk scheduling algorithm.



The image shows a C program in a text editor and its execution in a terminal window. The program simulates the First Come First Served (FCFS) disk scheduling algorithm. It takes the current head position and a list of requests as input, then calculates the total head movement by servicing requests in the order they were received.

```
19.cpp
1  #include<math.h>
2  #include<stdio.h>
3  #include<stdlib.h>
4  int main()
5  {
6      int i,n,req[50],mov=0,cp;
7      printf("enter the current position\n");
8      scanf("%d",&cp);
9      printf("enter the number of requests\n");
10     scanf("%d",&n);
11     printf("enter the request order\n");
12     for(i=0;i<n;i++)
13     {
14         scanf("%d",&req[i]);
15     }
16     mov=mov+abs(cp-req[0]);
17     printf("%d -> %d",cp,req[0]);
18     for(i=1;i<n;i++)
19     {
20         mov=mov+abs(req[i]-req[i-1]);
21         printf(" -> %d",req[i]);
22     }
23     printf("\n");
24     printf("total head movement = %d\n",mov);
25 }
```

CA\Users\kalya\OneDrive\Desktop\19.exe

```
enter the current position
2
enter the number of requests
4
enter the request order
2
3
4
5
2 -> 2 -> 3 -> 4 -> 5
total head movement = 3

-----
Process exited after 9.121 seconds with return value 0
Press any key to continue . . .
```