

```
1 #include<stdio.h>
2 #include<stdlib.h>
3 int main()
4 {
5     int RQ[100],i,n,TotalHeadMoment=0,initial;
6     printf("Enter the number of Requests\n");
7     scanf("%d",&n);
8     printf("Enter the Requests sequence\n");
9     for(i=0;i<n;i++)
10         scanf("%d",&RQ[i]);
11     printf("Enter initial head position\n");
12     scanf("%d",&initial);
13     for(i=0;i<n;i++)
14     {
15         TotalHeadMoment=TotalHeadMoment+abs(RQ[i]-initial);
16         initial=RQ[i];
17     }
18     printf("Total head moment is %d",TotalHeadMoment);
19     return 0;
20 }
21
```

```
Enter the number of Requests
7
Enter the Requests sequence
34
23
12
60
45
63
78
Enter initial head position
60
Total head moment is 144
-----
Process exited after 14.81 seconds with return value 0
Press any key to continue . . .
```