ASSIGNMENT NO. 8

1.SSTF

```c
#include<stdio.h>

#include<stdlib.h>

int main()

{

  int RQ[100],i,n,TotalHeadMoment=0,initial,count=0;

  printf("Enter the number of Requests\n");

  scanf("%d",&n);

  printf("Enter the Requests sequence\n");

  for(i=0;i<n;i++)

  scanf("%d",&RQ[i]);

  printf("Enter initial head position\n");

  scanf("%d",&initial);


  // logic for sstf disk scheduling


  /* loop will execute until all process is completed*/

  while(count!=n)

  {

  int min=1000,d,index;

  for(i=0;i<n;i++)

  {

  d=abs(RQ[i]-initial);

  if(min>d)
```

```c
            {

            min=d;

            index=i;

            }


            }

            TotalHeadMoment=TotalHeadMoment+min;

            initial=RQ[index];

            // 1000 is for max

            // you can use any number

            RQ[index]=1000;

            count++;

            }


            printf("Total head movement is %d",TotalHeadMoment);

            return 0;

}
```

OUTPUT:

```
guest-lzOeRo@ubuntu:~$ gcc pr8.c -lpthread
guest-lzOeRo@ubuntu:~$ ./a.out
Enter the number of Requests
7
Enter the Requests sequence
82
170
43
140
24
16
190
Enter initial head position
50
Total head movement is 208guest-lzOeRo@ubuntu:~$
```