

```

#include<stdio.h>
#include<math.h>

void current_differences(int request[],int n,int head, int diff[][2])
{
    int i;
    for(i=0;i<n;i++)
        diff[i][0] = abs(request[i] - head);
}

int min_difference(int diff[][2],int n)
{
    int i, loc = -1;
    int min = 9999;

    for(i=0;i<n;i++)
    {
        if(diff[i][0]<=min && diff[i][1]!=1)
        {
            min = diff[i][0];
            loc = i;
        }
    }
    return loc;
}

int sstf(int request[],int n,int head,int sequence[])
{
    int diff[100][2] = {0};
    int i,cnt = 0,loc;

    for(i=0;i<n;i++)
    {
        sequence[i] = head;

        current_differences(request, n, head, diff);
        loc = min_difference(diff, n);
        diff[loc][1] = 1;

        cnt += diff[loc][0];

        head = request[loc];
    }
    sequence[n] = head;
    return cnt;
}

```

```
int main()
{
    int i, n, request[100], head, sequence[100]={0}, seek_cnt;

    printf("\nEnter number of disk blocks: ");
    scanf("%d", &n);

    printf("\nEnter disk request string: ");
    for(i=0; i<n; i++)
        scanf("%d", &request[i]);

    printf("\nEnter current head position: ");
    scanf("%d", &head);

    seek_cnt = sstf(request, n, head, sequence);

    printf("\nSeek Sequence\n");
    for(i=0; i<=n; i++)
        printf("%d ", sequence[i]);

    printf("\nTotal Number of head movement : %d", seek_cnt);

    return 0;
}
```