SCAN DISK SCHEDULING

```c
#include <stdio.h>
#include <stdlib.h>
int main() {
    int n, head, i, j, seek=0, direction;
    int req[20], temp;
    printf("Enter number of requests: ");
    scanf("%d",&n);
    printf("Enter request sequence: ");
    for(i=0;i<n;i++) scanf("%d",&req[i]);
    printf("Enter initial head position: ");
    scanf("%d",&head);
    printf("Enter direction (0=left,1=right): ");
    scanf("%d",&direction);
    for(i=0;i<n-1;i++) {
        for(j=i+1;j<n;j++) {
            if(req[i]>req[j]) { temp=req[i]; req[i]=req[j]; req[j]=temp; }
        }
    }
    int pos=0;
    for(i=0;i<n;i++) if(req[i]>head) { pos=i; break; }
    if(direction==1) {
        for(i=pos;i<n;i++) { seek += abs(req[i]-head); head=req[i]; }
        seek += abs(199-head); head=199;
        for(i=pos-1;i>=0;i--) { seek += abs(req[i]-head); head=req[i]; }
    } else {
        for(i=pos-1;i>=0;i--) { seek += abs(req[i]-head); head=req[i]; }
        seek += abs(head-0); head=0;
        for(i=pos;i<n;i++) { seek += abs(req[i]-head); head=req[i]; }
    }
```

```c
    printf("Total Seek Time = %d\n",seek);
    return 0;
}
```