

```
/* C-SCAN */

#include<stdio.h>
#include<stdlib.h>

int main() {
    int i,j,seek = 0,n,size,d[100],disk;
    int temp,max,dloc;
    float avg;
    printf("\n  C-SCAN DISK SCHEDULING");
    printf("\n  -----");
    printf("\n  Enter total disk size: ");
    scanf("%d",&size);
    printf("  Enter size of the request queue: ");
    scanf("%d",&n);
    printf("  Enter requests: ");
    for(i=0;i<n;i++){
        scanf("%d",&d[i]);
    }
    printf("  Enter head position: ");
    scanf("%d",&disk);

    d[n]=disk;
    for(i = 0;i <= n;i++){
        for(j = 0;j <= n;j++){
            if(d[i] > d[j]){
                temp = d[i];
                d[i] = d[j];
                d[j] = temp;
            }
        }
    }
    max = d[n];
    for(i = 0;i <= n;i++){
        if(d[i] == disk){
            dloc=i;
            break;
        }
    }
    for(i = dloc;i <= n;i++){
        printf("%d  -->",d[i]);
    }
    printf("0-->");
    printf("199-->");
    for(i = 0;i < dloc;i++){
        printf("  %d-->",d[i]);
    }
    printf("%d",d[i]);
    seek = size-1+((size-1)-d[dloc])+d[dloc-1];
```

```
    printf("\n  Total seek time is : %d",seek);  
    avg=seek/(float)n;  
    printf("\n  Average seek time is : %f",avg);  
    printf("\n\n");  
    return 0;  
}
```