//look algorithm

#include <stdio.h>

#include <stdlib.h>

int main(){

int request[100],i,j,n,TotalHeadMoment=0,initial,size,move,temp,index;

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

scanf("%d",&n);

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

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

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

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

scanf("%d",&initial);

printf("Enter total disk size\n");

scanf("%d",&size);

printf("Enter the head movement direction for high 1 and for low 0\n");

scanf("%d", &move);

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

{

for (j=0;j<n-i-1;j++)

{

if (request[j]>request[j+1])

{

temp=request[j];

request[j]=request[j+1];

request[j+1]=temp;

}

}

}

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

{

if (initial<request[i])

{

index=i;

break;

}

}

if (move==1){

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

{

TotalHeadMoment=TotalHeadMoment+abs(request[i]-initial);

initial=request[i];

}

for (i=index-1;i>=0;i--){

TotalHeadMoment=TotalHeadMoment+abs(request[i]-initial);

initial=request[i];

}

}

else{

for (i=index-1;i>=0;i--)

{

TotalHeadMoment=TotalHeadMoment+abs(request[i]-initial);

initial=request[i];

}

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

{

TotalHeadMoment=TotalHeadMoment+abs(request[i]-initial);

initial=request[i];

}

}

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

return 0;

}

Output:

