#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);

while(count!=n)

{

int min=1000,d,index;

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

{

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

if(min>d)

{

min=d;

index=i;

}

}

TotalHeadMoment=TotalHeadMoment+min;

initial=RQ[index];

RQ[index]=1000;

count++;

}

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

return 0;

}

OUTPUT:

Enter the number of Requests

10

Enter the Requests sequence

345

465

678

124

372

643

216

302

418

513

Enter initial head position

420

Total head movement is 850

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Process exited after 43.99 seconds with return value 0

Press any key to continue . . .

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

return 0;

}