#include <stdio.h>

#include <stdlib.h>

#include <stdbool.h>

void fcfs(int requests[], int n, int head)

{

int total\_movement = 0;

int current\_position = head;

printf("Order of requests: ");

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

{

printf("%d ", requests[i]);

total\_movement += abs(current\_position - requests[i]);

current\_position = requests[i];

}

printf("\nTotal head movement: %d\n", total\_movement);

}

int main()

{

int n, head;

printf("Enter the number of requests : ");

scanf("%d", &n);

int requests[n];

printf("Enter the requests : ");

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

{

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

}

printf("Enter the initial head position: ");

scanf("%d", &head);

fcfs(requests, n, head);

return 0;

}

OUTPUT

Enter the number of requests : 5

Enter the requests : 10 50 30 20 40

Enter the initial head position: 35

Order of requests: 10 50 30 20 40

Total head movement: 115