8. Write a C program to simulate FCFS disk scheduling algorithm and execute your program and find the average head movement with the following test case:

No of tracks 5; Track position:55 58 60 70 18

#include <stdio.h>

#include <stdlib.h>

#include <math.h>

int main()

{

int n, i, head, total\_movement = 0;

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

scanf("%d", &n);

int tracks[n];

printf("Enter the track positions: ");

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

{

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

}

printf("Enter the head position: ");

scanf("%d", &head);

printf("The order of disk access is: ");

printf("%d", head);

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

{

printf(" -> %d", tracks[i]);

total\_movement += abs(head - tracks[i]);

head = tracks[i];

}

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

printf("Average head movement: %.2f\n", (float)total\_movement / n);

return 0;

}

