15.Write a C program to simulate FCFS disk scheduling algorithms and execute your program and find out and print the average head movement for the following test case.

No of tracks:9; Track position:55 58 60 70 18 90 150 160 184

#include <stdio.h>

#include <stdlib.h>

int main()

{

int tracks[] = {55, 58, 60, 70, 18, 90, 150, 160, 184};

int n = sizeof(tracks) / sizeof(tracks[0]);

int head\_pos = 50; // initial head position

int total\_head\_movement = 0;

printf("FCFS Disk Scheduling Algorithm\n");

printf("Initial Head Position: %d\n", head\_pos);

printf("Track Sequence: ");

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

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

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

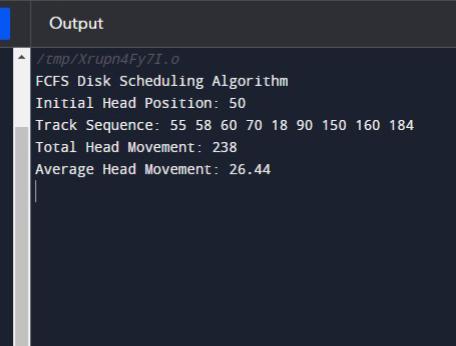
head\_pos = tracks[i];

}

printf("\nTotal Head Movement: %d\n", total\_head\_movement);

printf("Average Head Movement: %.2f\n", (float)total\_head\_movement / n);

return 0;

}