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

Program:

#include<stdio.h>

#include<stdlib.h> #include<math.h> int main() { int n=9, head\_pos=50, curr\_track, head\_movement=0, i; int tracks[] = {55, 58, 60, 70, 18, 90, 150, 160, 184}; printf("Track sequence: "); for(i=0; i<n; i++) printf("%d ", tracks[i]);

printf("\n\nFCFS Disk Scheduling Algorithm:\n"); printf("Current Head Position: %d\n", head\_pos); for(i=0; i<n; i++)

{

curr\_track = tracks[i];

head\_movement += abs(head\_pos - curr\_track);

head\_pos = curr\_track;

printf("Move to Track %d\n", curr\_track);

}

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

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

Output:

