#include <stdio.h>

#include <stdlib.h>

#include <math.h>

#define NUM\_TRACKS 9

int main() {

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

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

int total\_head\_movement = 0;

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

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

printf("Track Order: ");

for (int i = 0; i < NUM\_TRACKS; i++) {

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

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

head\_pos = tracks[i];

}

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

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

return 0;

}