// Program to stimulate FCFS disk scheduling. Calculate total seek time. Print accepted input & output in tabular format

#include <stdio.h>

#include <stdlib.h>

void FCFS(int head, int requests[], int n) {

int total\_seek\_time = 0;

int current\_position = head;

printf("\nFCFS Disk Scheduling\n");

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

printf("\nRequest\tCurrent Head Position\tSeek Time\n");

printf("-------\t----------------------\t---------\n");

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

int seek\_time = abs(requests[i] - current\_position);

total\_seek\_time += seek\_time;

printf("%d\t\t%d\t\t\t%d\n", requests[i], current\_position, seek\_time);

current\_position = requests[i];

}

printf("\nTotal Seek Time: %d\n", total\_seek\_time);

}

int main() {

int n, head;

// Input number of requests

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

scanf("%d", &n);

int requests[n];

// Input the disk requests

printf("Enter the disk requests:\n");

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

printf("Request %d: ", i + 1);

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

}

// Input initial head position

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

scanf("%d", &head);

// Call the FCFS function to calculate seek time

FCFS(head, requests, n);

return 0;

}