**37. Construct a C program to simulate the First Come First Served disk scheduling algorithm.**

**Aim:** To Construct a C program to simulate the First Come First Served disk scheduling algorithm.

# **ALGORITHM:-**

* 1. Start at the current position of the disk head.
  2. For each disk request in the queue:

Move the disk head to the requested track.

Calculate the seek time as the absolute difference between the new position of the disk head and the previous position

* 1. Add the seek time to the total seek time.

Update the previous position of the disk head to the current position.

* 1. Repeat step 2 for all disk requests in the queue.
  2. After serving all the requests, calculate and display the total seek time.
  3. Calculate and display the average seek time, which is the total seek time divided by the number of requests.

**Program:**

#include<stdio.h>

#include<stdlib.h> int main()

{

int RQ[100],i,n,TotalHeadMoment=0,initial; printf("Enter the number of Requests\n"); scanf("%d",&n);

printf("Enter the Requests sequence\n"); for(i=0;i<n;i++)

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

printf("Enter initial head position\n"); scanf("%d",&initial);

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

{

TotalHeadMoment=TotalHeadMoment+abs(RQ[i]-initial); initial=RQ[i];

}

printf("Total head moment is %d",TotalHeadMoment); return 0;

}

# **Output:**

