praveenkumar.R
192324012

Experiment-37:Construct a C program to simulate the First Come First Served disk scheduling algorithm.

Aim:

To simulate the First Come First Served (FCFS) disk scheduling algorithm in C.

Procedure:

1. Take the number of disk requests and the initial position of the disk head as input.
2. Use the FCFS algorithm to process the disk requests in the order they arrive.
3. Calculate the total seek time based on the initial position of the disk head and the order of requests.
4. Display the seek sequence and total seek time.

C Program:

```
#include <stdio.h>


int main() {
   int n, initial_position, total_seek_time = 0;
   printf("Enter the number of disk requests: ");
   scanf("%d", &n);


   int requests[n];
   printf("Enter the disk requests: \n");
   for (int i = 0; i < n; i++) {
      scanf("%d", &requests[i]);
   }


   printf("Enter the initial disk head position: ");
   scanf("%d", &initial_position);
```

```
    printf("Seek Sequence: ");
    int current_position = initial_position;
    for (int i = 0; i < n; i++) {
        printf("%d ", requests[i]);
        total_seek_time += abs(current_position - requests[i]);
        current_position = requests[i];
    }

    printf("\nTotal Seek Time: %d\n", total_seek_time);
    return 0;
}
```

Output:

Output

```
Enter the number of disk requests: 4
6
Enter the disk requests:
8
5
5
5
2
1
Enter the initial disk head position: 8
Seek Sequence: 8 5 5 5 2 1
Total Seek Time: 7
```