

Government Engineering College, Thrissur  
CS331 – System Software Lab  
Documentation -  
**Exp 5 – Disk Scheduling**

Date of Submission  
21 September 2020

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# Experiment 5

Simulate the following disk scheduling algorithms

- a) FCFS                      b) SCAN                      c) C-SCAN

## Compilation of Code

### Prerequisite

- The code is provided in the **program.c** along with this documentation. You can open the terminal in Linux (Ubuntu 18.04 tested). Then run the command

```
gcc program.c
```

```
./a.out
```

- We can execute the code in console and see the output as soon as we press enter key. There **one** input file **input.txt**. **Each requests should be provided in line by line**. Please note that last line must NOT be empty.
- We should also provide current head position for each disk scheduling algorithms in the console when there is a prompt.
- Output of the code will be printed on the **console**
- Note: Please see the output.txt file for the output I got on my machine.**

### Output / Screenshots

input.txt

```
Exp5 > Upload > ≡ input.txt
1    98
2   183
3    41
4   122
5    14
6   124
7    65
8    67
```

### Menu

```
-----Menu-----
1. FCFS
2. SCAN
3. C-SCAN
4. Exit
Select:1
```

### 1. FCFS

```
-----Menu-----
1. FCFS
2. SCAN
3. C-SCAN
4. Exit
Select:1

-----FCFS disk Scheduling-----
Enter current header position: 53
Total Head movements: 632
```

### 2. SCAN

```
-----Menu-----
1. FCFS
2. SCAN
3. C-SCAN
4. Exit
Select:2

-----SCAN disk Scheduling-----
Enter current header position: 53
Total Head movements: 331
```

### 3. C-SCAN

```
-----Menu-----
1. FCFS
2. SCAN
3. C-SCAN
4. Exit
Select:3

-----C-SCAN disk Scheduling-----
Enter current header position: 53
Total Head movements: 386
```

### 4. Exit

```
-----Menu-----
1. FCFS
2. SCAN
3. C-SCAN
4. Exit
Select:4
```