# Government Engineering College, Thrissur

## CS331 – System Software Lab

## Documentation –

## Exp5: Disk Scheduling Algorithms

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# Aim of the experiment

To simulate the following disk scheduling algorithms

1. FCFS

2. SCAN

3.C-SCAN

# THEORY

Disk scheduling is done by operating systems to schedule I/O requests arriving for the disk. Disk scheduling is also known as I/O scheduling.

1.FCFS: FCFS is the simplest of all the Disk Scheduling Algorithms.
In FCFS, the requests are addressed in the order they arrive in the disk queue.

2.SCAN: In SCAN algorithm the disk arm moves into a particular direction and services the requests coming in its path and after reaching the end of disk, it reverses its direction and again services the request arriving in its path. So, this algorithm works as an elevator and hence also known as elevator algorithm.

3.CSCAN: Like SCAN , C-SCAN moves the head from one end servicing all the requests to the other end. However, assoon as the head reaches the other end, it immediately returns to the beginning of the disk without servicing any requests on the return trip and starts servicing again once it reaches the beginning.

# Compilation of code

The code is provided in the **program.c** file. Open terminal and then run the commands:

*gcc program.c*

*./a.out*

The content of **input.txt** file is displayed in the program.

Note: There should not be a new line.

## Screenshots of the output

The output obtained upon execution of program.c is as follows: