

**DISK scheduling algorithm**  
**Visualized with HTML / CSI / JS**

**OS Team**

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# **Software and Dependencies**

- **VS Code:-**

1. Link - <https://code.visualstudio.com/download>

- **Dependencies:-**

1. JQuery 3.1.1
2. Bootstrap

## **FCFS Disk Scheduling Algorithm:-**

- As the name suggests, this algorithm entertains requests in the order they arrive in the disk queue.

- It is the simplest disk scheduling algorithm.

### Advantages-

- It is simple, easy to understand and implement.
- It does not cause starvation to any request.

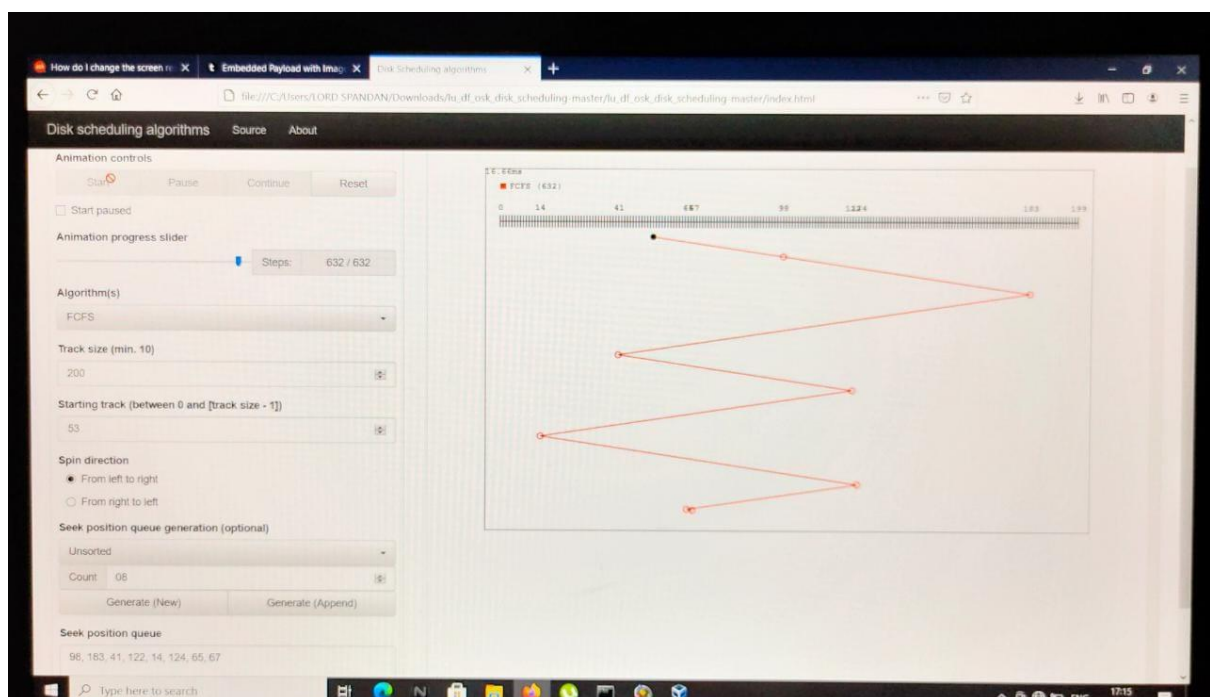
### Disadvantages-

- It results in increased total seek time.

### Problem:-

Consider a disk queue with requests for I/O to blocks on cylinders 98, 183, 41, 122, 14, 124, 65, 67. The FCFS scheduling algorithm is used. The head is initially at cylinder number 53. The cylinders are numbered from 0 to 199. The total head movement (in number of cylinders) incurred while servicing these requests is \_\_\_\_.

### Solution:-



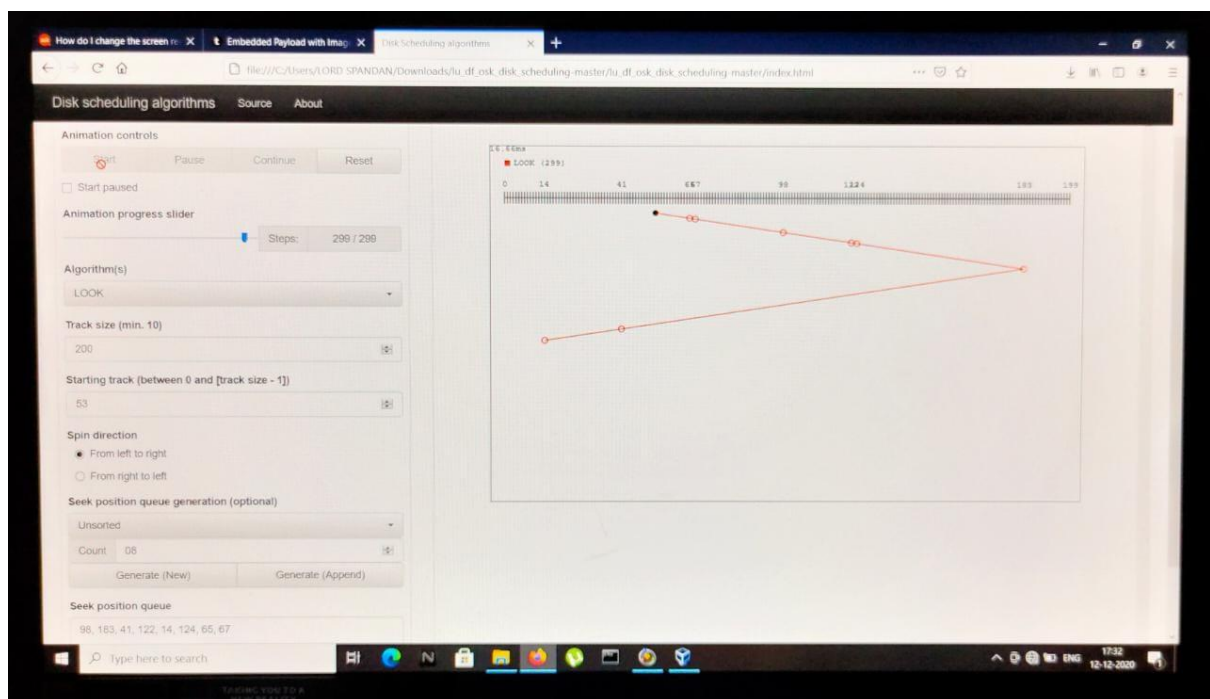
### LOOK Disk Scheduling Algorithm:-

- LOOK Algorithm is an improved version of the SCAN Algorithm.
- Head starts from the first request at one end of the disk and moves towards the last request at the other end servicing all the requests in between.
- After reaching the last request at the other end, head reverses its direction.
- It then returns to the first request at the starting end servicing all the requests in between.
- The same process repeats.

## Problem-

Consider a disk queue with requests for I/O to blocks on cylinders 98, 183, 41, 122, 14, 124, 65, 67. The LOOK scheduling algorithm is used. The head is initially at cylinder number 53 moving towards larger cylinder numbers on its servicing pass. The cylinders are numbered from 0 to 199. The total head movement (in number of cylinders) incurred while servicing these requests is \_\_\_\_.

## Solution:-



## **6. CONCLUSION:-**

In conclusion, we propose an efficient, universal, low-maintenance disk I/O scheduling scheme that can automate the manual configuration and selection of disk schedulers. The scheduling scheme can learn about workloads, file systems, disk systems, CPU systems, and user preferences. From the above experiment and comparison of proposed algorithm with existing algorithm it is clear to us that the proposed algorithm reduces head movement and decide best route. It is new era for next generation.