

Documentation

generateArrOfRequests()

Parameters:

None

Return Value:

An array of randomly generated 1,000 requests with 5,000 cylinders.

serviceWithFCFS(initialPosition, arrOfRequests)

Parameters:

initialPosition (Int): Where the head is located before servicing queues. It is provided by a command line argument.

arrOfRequests (Array): An array of type int which is to be serviced.

Return Value:

The total number of head movements.

serviceWithSSTF(initialPosition, arrOfRequests)

Parameters:

initialPosition (Int): Where the head is located before servicing queues. It is provided by a command line argument.

arrOfRequests (Array): An array of type int which is to be serviced.

Return Value:

The total number of head movements.

serviceWithSCAN(initialPosition, arrOfRequests)

Parameters:

initialPosition (Int): Where the head is located before servicing queues. It is provided by a command line argument.

arrOfRequests (Array): An array of type int which is to be serviced.

Return Value:

The total number of head movements.

Running the program

You can run our program like so:

```
node Assignment4.js [initialPosition]
```

[initialPosition] is the only command-line argument that our program accepts.

Input

Any number can be provided between 0-4999:

```
node Assignment4.js 2393
```

Output

Our program outputs directly to the console. Running the above command resulted in the following:

```
Total Head Movement with FCFS: 1635641  
Total Head Movement with SSTF: 7380  
Total Head Movement with SCAN: 9768
```