

## Assignment No 6:

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Sub: Operating System Lab

Aim: - Disk Management Technique ( FCFS )

Code ==

```
#include <stdio.h>
#include <stdlib.h>

int main() {
    int n, i, head, seekTime = 0;

    // Accept the number of requests
    printf("Enter the number of requests: ");
    scanf("%d", &n);

    int requests[n];

    // Accept the initial head position
    printf("Enter the initial head position: ");
    scanf("%d", &head);

    // Accept the sequence of requests
    printf("Enter the request sequence:\n");
    for (i = 0; i < n; i++) {
        scanf("%d", &requests[i]);
    }

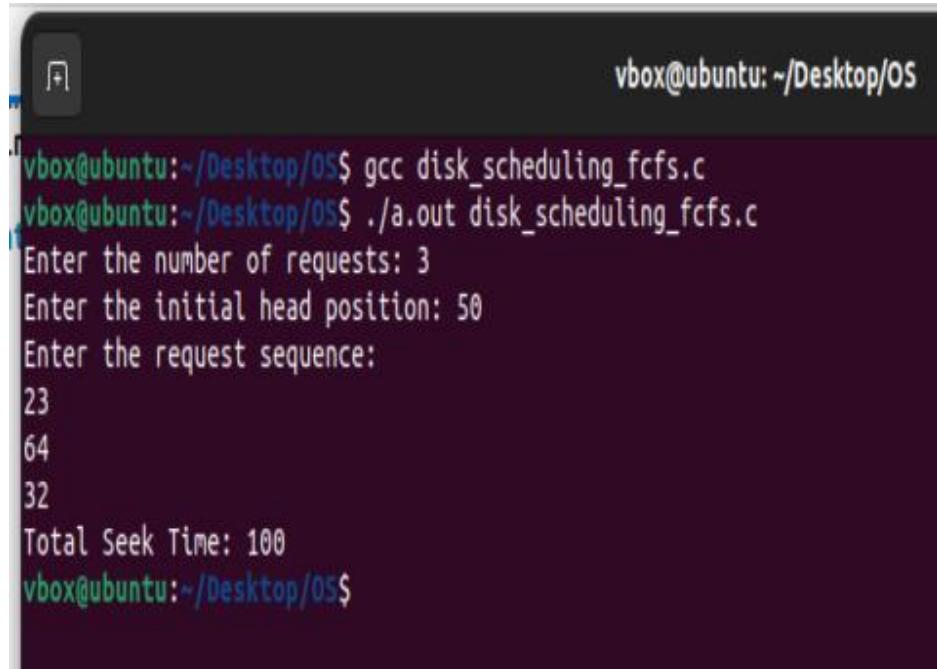
    // Calculate total seek time for FCFS
    for (i = 0; i < n; i++) {
        seekTime += abs(requests[i] - head); // Calculate seek time from current head position to the request
        head = requests[i]; // Update head to the current request position
    }
}
```

```
}

// Output total seek time
printf("Total Seek Time: %d\n", seekTime);

return 0;
}
```

**Output ==>**



The screenshot shows a terminal window on an Ubuntu system. The command `gcc disk\_scheduling\_fcfs.c` is run to compile the source code. Then, the executable `./a.out` is run with the command `disk\_scheduling\_fcfs.c`. The program prompts for the number of requests (3), the initial head position (50), and the request sequence (23, 64, 32). Finally, it outputs the total seek time (100).

```
vbox@ubuntu:~/Desktop/OS$ gcc disk_scheduling_fcfs.c
vbox@ubuntu:~/Desktop/OS$ ./a.out disk_scheduling_fcfs.c
Enter the number of requests: 3
Enter the initial head position: 50
Enter the request sequence:
23
64
32
Total Seek Time: 100
vbox@ubuntu:~/Desktop/OS$
```