

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]);
    }

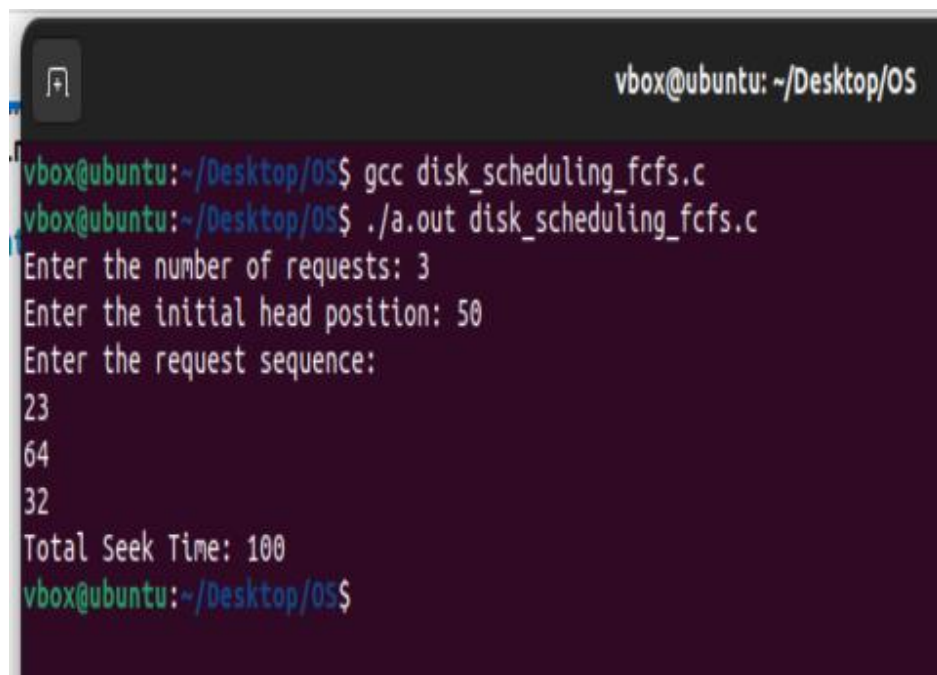
    // Calculate total seek time for FCFS
    for (i = 0; i < n; i++) {
        seekTime += abs(requests[i] - head); // Calculate seek time from current head position to the request
        head = requests[i];                // Update head to the current request position
    }
}
```

```
}

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

return 0;
}
```

Output ==

A terminal window titled 'vbox@ubuntu: ~/Desktop/OS' showing the execution of a C program. The user enters the number of requests as 3, the initial head position as 50, and the request sequence as 23, 64, and 32. The program outputs '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$
```