

37. Construct a C program to simulate the First Come First Served disk scheduling algorithm.

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

int main() {
    int queue[20], n, head, i, total = 0, distance;
    printf("Enter the number of disk requests: ");
    scanf("%d", &n);
    printf("Enter the disk request queue (in cylinder numbers):\n");
    for (i = 0; i < n; i++) {
        scanf("%d", &queue[i]);
    }
    printf("Enter the initial head position: ");
    scanf("%d", &head);
    printf("\nSeek Sequence is:\n");
    for (i = 0; i < n; i++) {
        distance = abs(queue[i] - head);
        total += distance;
        head = queue[i];
        printf("%d -> ", head);
    }

    printf("\nTotal head movement: %d\n", total);
    printf("Average head movement: %.2f\n", (float) total / n);
    return 0;
}
```

OUTPUT:

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File 'demo.txt' created successfully.

Initial File permissions: rw-r--r--

File permissions changed to 754 (rwxr-xr--).

Updated File permissions: rwxr-xr--

Explanation:

Owner: rwx (read, write, execute)

Group: r-x (read, execute)

Others: r-- (read only)

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