

//FIFO Disk Scheduling Algorithm :

```
#include <stdio.h>
#include <stdlib.h>
int main() {
    int n, i, head, total_movement = 0;
    printf("Enter number of disk requests: ");
    scanf("%d", &n);
    int requests[n];
    printf("Enter the request sequence: ");
    for (i = 0; i < n; i++) {
        scanf("%d", &requests[i]);
    }
    printf("Enter initial head position: ");
    scanf("%d", &head);
    printf("\nDisk Sequence: %d", head);
    for (i = 0; i < n; i++) {
        total_movement += abs(requests[i] - head);
        head = requests[i];
        printf(" %d", head);
    }
    printf("\n\nTotal Head Movement: %d", total_movement);
    printf("\nAverage Seek Time: %.2f\n", (float)total_movement / n);
    return 0;
}
```

C - LOOK Disk Scheduling Algorithm :

```
#include <stdio.h>
#include <stdlib.h>
int main() {
    int n, i, j, head, total_movement = 0, direction, index;
    printf("Enter number of disk requests: ");
    scanf("%d", &n);
    int requests[n];
    printf("Enter the request sequence: ");
    for (i = 0; i < n; i++) {
        scanf("%d", &requests[i]);
    }
    printf("Enter initial head position: ");
    scanf("%d", &head);
    printf("Enter head movement direction (1 for high/right, 0 for low/left): ");
    scanf("%d", &direction);
    // Sort requests
    for (i = 0; i < n - 1; i++) {
        for (j = i + 1; j < n; j++) {
            if (requests[i] > requests[j]) {
                int temp = requests[i];
                requests[i] = requests[j];
                requests[j] = temp;
            }
        }
    }
    // Find index of first request greater than head
    for (i = 0; i < n; i++) {
        if (head < requests[i]) {
            index = i;
            break;
        }
    }
    printf("\nSeek Sequence: %d", head);
    // Move towards higher tracks
```

```

if (direction == 1) {
for (i = index; i < n; i++) {
total_movement += abs(head - requests[i]);
head = requests[i];
printf("  %d", head);
}
// Jump to the lowest request
total_movement += abs(head - requests[0]);
head = requests[0];
printf("  %d", head);
for (i = 1; i < index; i++) {
total_movement += abs(head - requests[i]);
head = requests[i];
printf("  %d", head);
}
}
// Move towards lower tracks
else {
for (i = index - 1; i >= 0; i--) {
total_movement += abs(head - requests[i]);
head = requests[i];
printf("  %d", head);
}
// Jump to the highest request
total_movement += abs(head - requests[n - 1]);
head = requests[n - 1];
printf("  %d", head);
for (i = n - 2; i >= index; i--) {
total_movement += abs(head - requests[i]);
head = requests[i];
printf("  %d", head);
}
}
printf("\n\nTotal Head Movement: %d", total_movement);
printf("\nAverage Head Movement: %.2f\n", (float)total_movement / n);
return 0;
}

```