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#include <stdio.h>

#include <stdlib.h>

#define MAX 100

int compare(const void *a, const void *b) {
    return (*(int*)a - *(int*)b);
}

int main() {
    int head, n, total = 0;
    float avg_seek_time;

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

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

    int requests[n];

    printf("Enter the disk request queue:\n");
    for (int i = 0; i < n; i++) {
        scanf("%d", &requests[i]);
    }

    // Sort the disk request queue
    qsort(requests, n, sizeof(int), compare);

    // Calculate total head movement
    int index;
```

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for (index = 0; index < n; index++) {
    if (requests[index] >= head) {
        break;
    }
}

for (int i = index; i < n; i++) {
    total += (requests[i] - head);
    head = requests[i];
}

if (index != 0) {
    total += (requests[n - 1] - requests[index - 1]);
    head = 0;
}

// Calculate average seek time
avg_seek_time = (float)total / n;

// Display results
printf("\nTotal head movement: %d\n", total);
printf("Average seek time: %.2f\n", avg_seek_time);

return 0;
}

```

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C:\Users\kondur\OneDrive\ID x + v
Enter the initial head position: 3
Enter the number of disk requests: 2
Enter the disk request queue:
6
8

Total head movement: 5
Average seek time: 2.50

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Process exited after 6.309 seconds with return value 0
Press any key to continue . . . |
```