d) c-LOOK

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

void cLookDiskScheduling(int requests[], int n, int start, int diskSize) {
  int totalHeadMovement = 0;

  // Sorting the requests
  for (int i = 0; i < n - 1; i++) {
    for (int j = 0; j < n - i - 1; j++) {
      if (requests[j] > requests[j + 1]) {
        int temp = requests[j];
        requests[j] = requests[j + 1];
        requests[j + 1] = temp;
      }
    }
  }

  printf("Disk Scheduling (C-LOOK):\n");

  int left[n], right[n];
  int leftCount = 0, rightCount = 0;

  // Divide the requests into left and right of the starting position
  for (int i = 0; i < n; i++) {
    if (requests[i] < start) {
      left[leftCount++] = requests[i];
    } else {
      right[rightCount++] = requests[i];
    }
  }

  // Process the right side first (if moving right)
  for (int i = 0; i < rightCount; i++) {
    totalHeadMovement += abs(start - right[i]);
    printf("Move from %d to %d\n", start, right[i]);
    start = right[i];
  }

  // Jump to the leftmost request (circular motion)
  totalHeadMovement += abs(start - left[0]);
  printf("Jump from %d to %d\n", start, left[0]);
  start = left[0];

  // Process the left side after circular motion
  for (int i = 1; i < leftCount; i++) {
    totalHeadMovement += abs(start - left[i]);
```

```
        printf("Move from %d to %d\n", start, left[i]);
        start = left[i];
    }

    printf("\nTotal Head Movement = %d\n", totalHeadMovement);
}

int main() {
    int n, start, diskSize;

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

    int requests[n];

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

    printf("Enter the starting position of the disk head: ");
    scanf("%d", &start);

    printf("Enter the disk size (total number of tracks): ");
    scanf("%d", &diskSize);

    cLookDiskScheduling(requests, n, start, diskSize);

    return 0;
}
```

Output

```
Enter the number of disk requests: 2
Enter the disk requests:
2
6
Enter the starting position of the disk head: 3
Enter the disk size (total number of tracks): 3
Disk Scheduling (C-LOOK):
Move from 3 to 6
Jump from 6 to 2

Total Head Movement = 7


=== Code Execution Successful ===
```