LOOK DISKSCHEDULING

#include <stdio.h>

#include <stdlib.h>

#include <math.h>

int abs(int a)

{

return (a < 0) ? -a : a;

}

int compare(const void\* a, const void\* b)

{

return ((int)a - (int)b);

}

int main()

{

int i;

int tracks[] = {55, 58, 60, 70, 18};

int n = sizeof(tracks) / sizeof(tracks[0]);

int head;

printf("Enter the initial position of the head: ");

scanf("%d", &head);

qsort(tracks, n, sizeof(tracks[0]), compare);

int closest = 0;

for ( i = 0; i < n; i++) {

if (tracks[i] >= head) {

closest = i;

break;

}

}

int totalMovement = 0;

int currentTrack = closest;

int direction = 1;

while (currentTrack >= 0 && currentTrack < n) {

totalMovement += abs(head - tracks[currentTrack]);

head = tracks[currentTrack];

currentTrack += direction;

if (currentTrack == n) {

direction = -1;

currentTrack -= 2;

} else if (currentTrack == -1) {

direction = 1;

currentTrack = 1;

}

}

float averageMovement = (float)totalMovement / n;

printf("Average head movement: %.2f\n", averageMovement);

return 0;

}

OUTPUT: 