Graphic Era Hill University, Dehradun (Answer Sheet for Online Examination Aug 2021)

Please tick (√) your campus: (DEHRADUN/BHIMTAL/HALDWANI)

Name: Naman Univ Roll No. 2021063 Student ID: 20051551 Date: 22/3/21

Course: BSc IT Branch: hall Sem: II Section: B

Subject Name: Operating System (Lab) Subject Code: PBS1-202 Page No. 2

Ans 2.

```
# include < stdio.h >
# include < stdio.h >
int main ()
{
  int RQ [100], i, j, n Total Head Movement
= 0, initial, size, move;
printf ("Enter the number of Request \n");
scanf ("%d", & n);
 printf (" Enter the Requests Sequence \n");
for (i=0; i<n; i++)
 scanf (" enter initial ("%d", & initial");
printf (" Enter total disk size \n");
scan f ("%d", & initial);
 printf (Enter total disk size \n");
 scan f ("%d", & size);
printf (" Enter the head movement
  direction for high 1 and for low
  0 \n");
 scan f ("%d", & move);

#// logic for Scan disk scheduling

for (i=0; i<n; i++)
{
   for (j=0; j<n-i -1; j++)
{
    if (RQ [j] > RQ [j+1])
```

Signature of Student

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Please tick (✓) your campus: (DEHRADUN/BHIMTAL/HALDWANI)

Name: Naman Univ.Roll No. 2033068 Student ID. 2065161 Date: 27/8/21

Course: B.C.A Branch: B.C.A Sem: II Section: B

Subject Name: Operating System Subject Code: BCA-202 Page No. 3

```
{
if (RQ[j] > RQ[j+1])
{
int temp;
temp = RQ[j];
RQ[j] = RQ[j+1];
RQ[j+1] = temp;
}
}
}

int index;
for (i=0; i<n; i++)
{
if (initial < RQ[i])
{
index = i;
break;
}
}

// if movement is towards high value
if (move == 1)
{
for (i = index; i<n; i++)
{
```

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```
Total Head Moment = Total Head Moment +
    abs (RQ[i] - initial);
    initial = RQ[i];
}

// last movement for max size
Total Head Moment = Total Head Moment +
abs (size - RQ[i-1] - 1);
initial = size - 1;
for (i = index - 1; i >= 0; i--)
{

Total Head Moment = Total Head Moment
+ abs (RQ[i] - initial);
    initial = RQ[i];

}
}

// if movement is towards low value.
else
{
for (i = index - 1; i >= 0; i--)
{

Total Head Moment = Total Head Moment
+ abs (RQ[i] - initial);
    initial = RQ[i];
}
```

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```
// last movement for min size

Total Head Movement = Total Head Moment
+ abs (RQ [i+1] - 0);
  initial = 0;
  for (i = index; i<n ; i++)
  {
     Total Head Moment = Total Head Moment
   + abs (RQ [i] - initial);
     initial = RQ [i];

  }
}

printf ("Total head movement is %d",
  Total Head Moment);
return 0;

}
```

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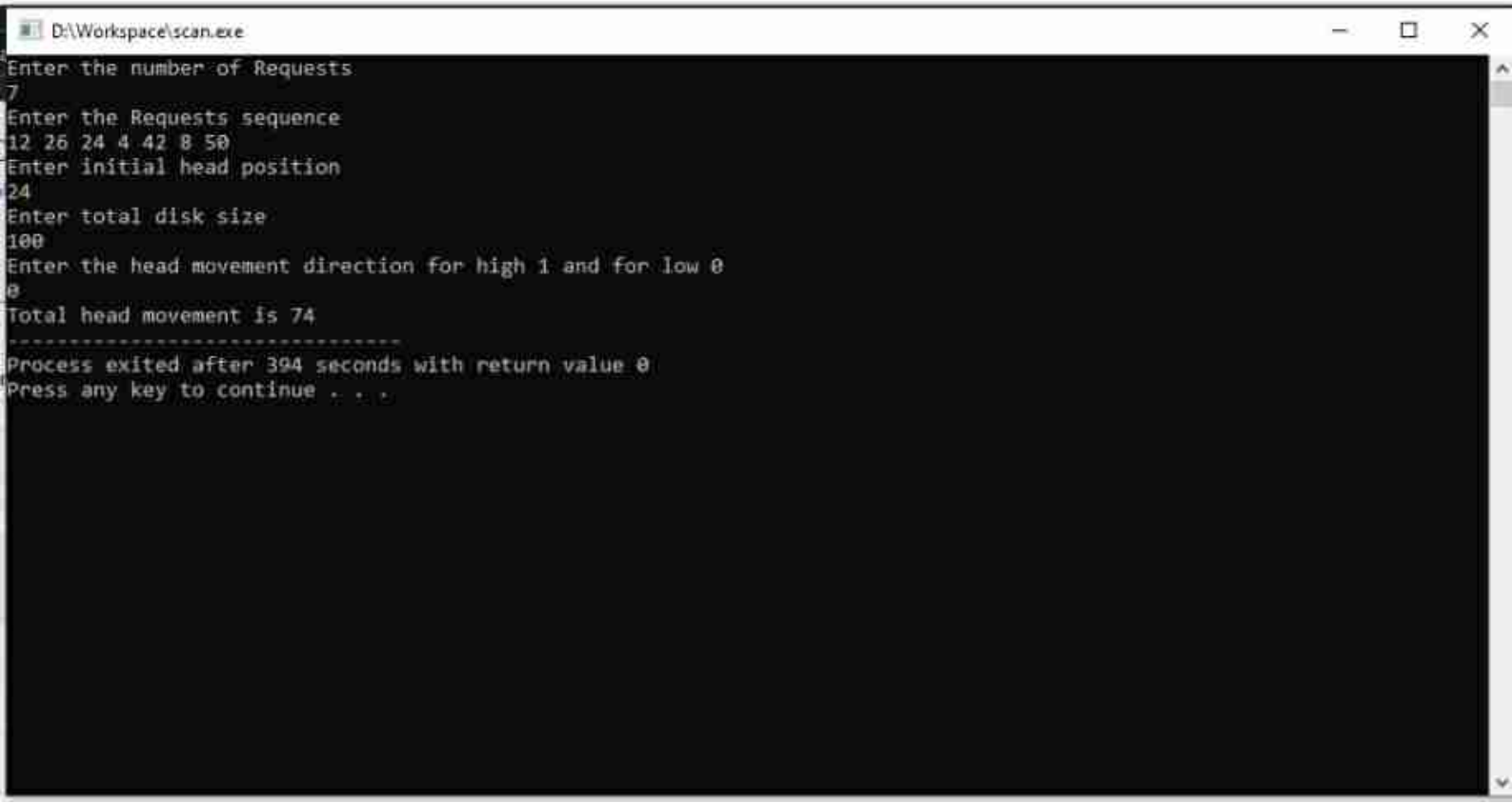
D:\Workspace\scan.exe
Enter the number of Requests
7
Enter the Requests sequence
12 26 24 4 42 8 50
Enter initial head position
24
Enter total disk size
100
Enter the head movement direction for high 1 and for low 0
0
Total head movement is 74

Process exited after 394 seconds with return value 0
Press any key to continue . . .