Graphic Era hill University.

sign (Neelam Hussain)

Name - Neelam
Roll No:- 2023069
Subject → Practical (Operating System)
Student id:- 20052049

Course:- Bsc(IT)
Sec - A
Sem:- 2nd
Campus:- Dehradun

Q1 Program

```
#include<stdio.h>
int main()
{
printf("\n \t\t\t Memory Management - Worst fit ");
int i, j, nblocks, nfiles, temp, top=0;
int frag[10], blocks[10], files[10];
static int block_arr[10], file_arr[10];
Printf("\n Enter the total number of Blocks :");
Scanf("%d", &nblocks);
printf("Enter the total number of files:\n");
Scanf("%d", &nfiles);
Printf("Enter the size of the Blocks: \n");
for(i=0; i<nblocks; i++)
{
 printf("Block NO. %d: \t", i+1);
 Scanf("%d", &blocks[i]);
}
Printf("Enter the size of the Files :\n");
```

```
for(i=0; i<nfiles; i++)
{
printf("file NO.-%d:\t", i+1);
scanf("%d", &files[i]);
}
for(i=0; i<nfiles; i++)
{
for(j=0; j<nblocks; j++)
{
if(block_arr[j]!=1)
{
temp=blocks[j]-files[i];
if(temp>=0)
{
if(top<temp)
{
file_arr[i]=j;
top=temp;
}
}
}
frag[i]=top;
block_arr[file_arr[i]]=1;
top=0;
}
}
printf("\n Files Number\t file size\t Block Number\tBlock
size\t fragment");
```

```
for(i=0; i< nfiles; i++)
{
 Printf("\n%d\t\t%d\t\t%d\t\t%d",i,files[i],file_arr
[i],blocks[file_arr[i]],frag[i]);
 }

 printf("\n");
 return 0;
 }.
```

(Delwar Hussain).

```
                    Memory Management - Worst Fit
Enter the Total Number of Blocks: 3
Enter the Total Number of Files: 2

Enter the Size of the Blocks:
Block No.1:     5
Block No.2:     2
Block No.3:     7
Enter the Size of the Files:
File No.1:      1
File No.2:      4

File Number     File Size       Block Number    Block Size      Fragment
0               1               2               7               6
1               4               0               5               0
PS C:\Users\neelam\OneDrive\Documents\vs code c language\ds practice>
```

Graphic Era hill University (Neelam Husain)

Name!- Neelam
Course!- Bsc (it)
Roll No!- 2023069
Sec!- A
Subject!- Practical (Operating system)
Sem!- 2nd
Student id!- 20052049
Campus!- Dehradun

Q2.

```
#include<stdio.h>
#include<stdlib.h>
int main()
{
   int RS[100],i,j,n, Total head Movement=0, initial, size, move;
printf("Enter the number of Requests \n");
Scanf("%d",&n);
Printf("Enter the Requests sequence\n");
for(i=0;i<n;i++)
  Scanf("%d",&RS[i]);
Printf("Enter initial head position\n");
scanf("%d",&initial);
printf("Enter total disk size\n");
Scanf("%d",&size);

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

(Helal Hussain).

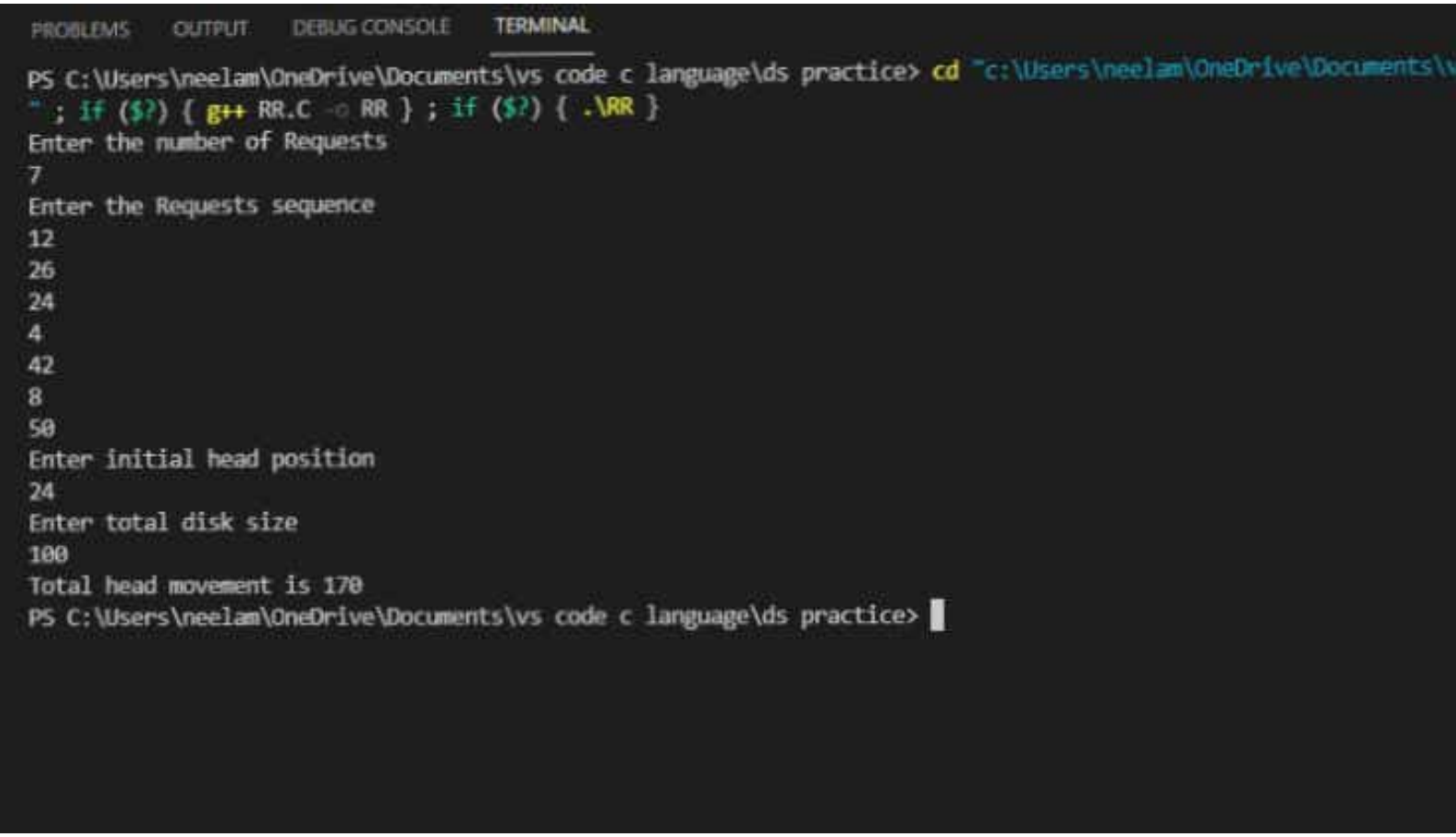
```
int temp;
temp = RS[j];
RS[j] = RS[j+1];
RS[j+1] = temp;
}
}
}

int index;
for(i=0; i<n; i++)
{
if(initial < RS[i])
{
index = i;
break;
}
}
for(i= index; i<n; i++)
{
Total head movement = Total head movement + abs(RS[i]-initial);
initial = RS[i];
}

Total_Headmovement = Total head movement + abs(size - RS[i-1] - 1);
initial = size-1;
for (i= index -1; i >=0; i--)
{
```

```
Totalheadmovement = Totalheadmovement + abs(RS[i] - initial);
initial = RS[i];
}
printf("Total head movement is %d", Totalheadmovement);
return 0;
}
```

Afelam Hussain.


PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
PS C:\Users\neelam\OneDrive\Documents\vs code c language\ds practice> cd "c:\Users\neelam\OneDrive\Documents\v
" ; if ($?) { g++ RR.C -o RR } ; if ($?) { .\RR }
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
Total head movement is 170
PS C:\Users\neelam\OneDrive\Documents\vs code c language\ds practice>