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Date - 27/8/2021 Student ID. - 2005108
Subject - operating System

Program

a) WORST - FIT

```
#include <stdio.h>
#include <conio.h>
#define max 25
void main()
{
int frag[max], b[max], f[max], i, j, nf, temp;
static int bf[max], ff[max];
clrscr();
printf("\n\t Memory Management Scheme- first fit");
printf("\n Enter the number of blocks: ");
scanf("%d", and nb);
printf("\n Enter the size of the blocks:-\n");
for(i=1; i<=nb; i++)
{
printf("Enter the number of files:");
scanf("%d", &nf);
printf("\n Enter the size of the blocks:-\n");
for(i=1; i<=nb; i++)
{
```

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```
printf ("block %d:", i);
scanf ("%d", &b[i]);
}
printf ("Enter the size of the files :-\n");
for (i=1; i<=nf; i++)
{
printf ("file %d:", i);
scanf ("%d", &f[i]);
}
for (i=1; i<=nf; i++)
{
printf ("file %d:", i);
scanf ("%d", &f[i]);
for (j=1; j<=nb; j++)
{
if (bf[j] != 1)
{
temp = b[j] - f[i];
if (temp >= 0)
{
ff[i] = j;
break;
```

```
}
}
}
}
frag[i] = temp;
bf[ff[i]] = 1;
}
printf("\nfile_no:\t file_size:\t block_no:\t block_size
:\t fragment");
for(i=1; j<=nf; i++)
printf("\n %d \t\t %d \t\t %d \t\t %d \t\t %d", i, f[i], ff[i], b[ff[i]], frag[i]);
getch();
}
```

INPUT

Enter the number of blocks:-3
Enter the number of files: 2

Enter the size of the blocks :-
block 1:5
block 2:7
block 3:7

Assignment

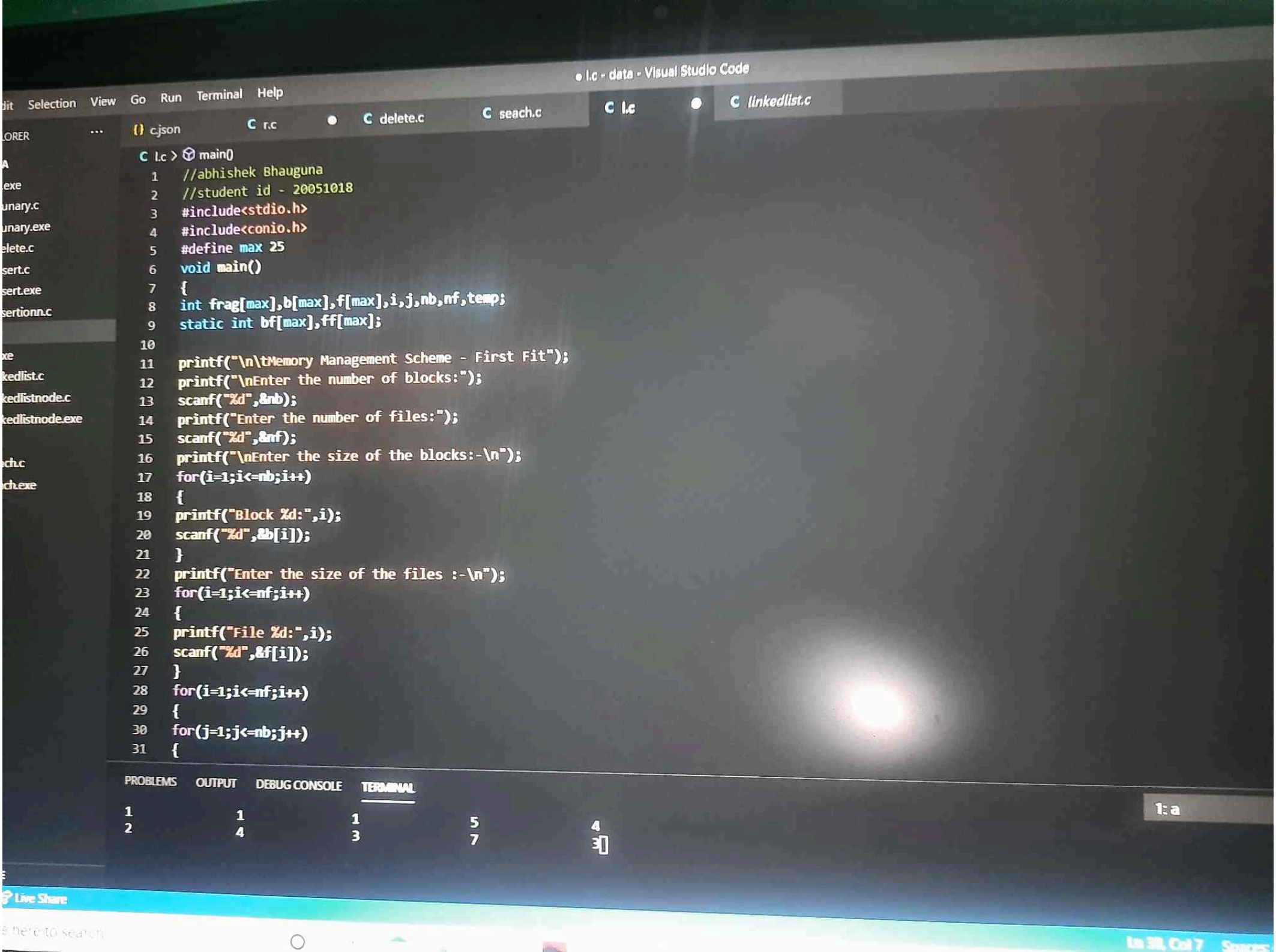
Enter the size of the files :-

file 1 : 1
file 2 : 4

Output.

| file No. | file size | block No | block size | fragment |
|---|---|---|---|---|
| 1 | 1 | 1 | 5 | 4 |
| 2 | 4 | 3 | 7 | 3 |

Akhilesh


l.c - data - Visual Studio Code
Selection View Go Run Terminal Help
c.json
r.c
delete.c
seach.c
l.c
linkedlist.c
l.c > main()
//abhishek Bhauguna
//student id - 20051018
#include<stdio.h>
#include<conio.h>
#define max 25
void main()
{
int frag[max],b[max],f[max],i,j,nb,nf,temp;
static int bf[max],ff[max];
printf("\n\tMemory Management Scheme - First Fit");
printf("\nEnter the number of blocks:");
scanf("%d",&nb);
printf("Enter the number of files:");
scanf("%d",&nf);
printf("\nEnter the size of the blocks:-\n");
for(i=1;i<=nb;i++)
{
printf("Block %d:",i);
scanf("%d",&b[i]);
}
printf("Enter the size of the files :-\n");
for(i=1;i<=nf;i++)
{
printf("File %d:",i);
scanf("%d",&f[i]);
}
for(i=1;i<=nf;i++)
{
for(j=1;j<=nb;j++)
{
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL
1 1 1 5 4
2 4 3 7 3
1: a
Live Share

```
printf("Enter the size of the files :-\n");
for(i=1;i<=nf;i++)
{
printf("File %d:",i);
scanf("%d",&f[i]);
}
for(i=1;i<=nf;i++)
{
for(j=1;j<=nb;j++)
{
if(bf[j]!=1)
{
temp=b[j]-f[i];
if(temp>=0)
{
ff[i]=j;
break;
}
}
}
frag[i]=temp;
bf[ff[i]]=1;
}
printf("\nFile_no:\tFile_size :\tBlock_no:\tBlock_size:\tFragement");
for(i=1;i<=nf;i++)
printf("\n%d\t\t%d\t\t%d\t\t%d\t\t%d",i,f[i],ff[i],b[ff[i]],frag[i]);
getch();
}
```

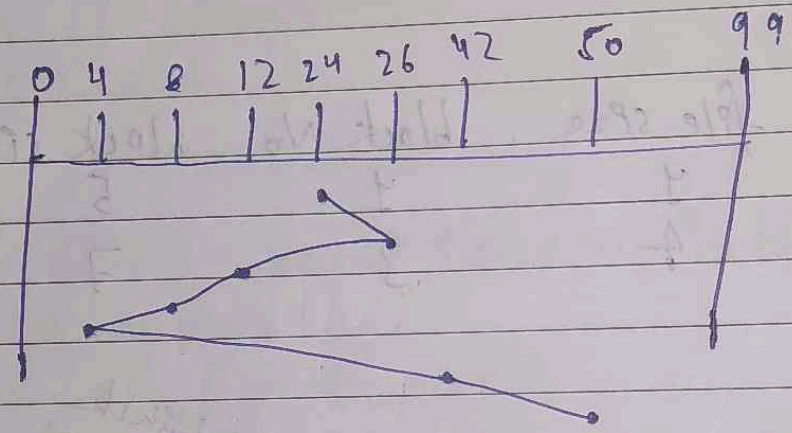
PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
File 2:4

File_no:        File_size :     Block_no:       Block_size:     Fragement
1               1               1               5               4
2               4               3               7               3
```

Ans 2.

Sol' = SSTF: The movement of disk head from 143 to others 1's as shown in diagram.




So, total head movement = 02 + 14 + 04 + 04 + 38 + 08
= 70 cylinders.

seek time = 70 × 6 = 420 m sec = 0.42 sec

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```
#include <stdio.h>
#include <stdio.h>
int main()
{
int i, j, sum=0, n;
int d[20];
int disk; // loc of head.
int temp, max;
int dloc; // loc of disk in array
printf("Enter number of location(f");
scanf("%d", &n);
printf("Enter position of head(t");
scanf("%d", &disk);
printf("Enter elements of disk queue(n");
for(i=0; i<n; i++)
{
scanf("%d", &d[i]);
}
d[n]=disk;
n=n+1;
```

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```
for (i=0; i<n; i++) // sorting disk locations
  {
    for (j=i, j<n; j++)
  {
    if d [i] > d [j]
    {
      temp = d[i];
      d[i] = d[j];
      d[j] = temp;
    }
  }
}

    Max = d[n];
for (i=0; i<n; i++) // to find loc of dest of array
{ if (disk==d[i]) { d%d<=i; break; }
}.
for ( i=dloc; i>=0; i--)
  {
    printf (" %d -->", d[i]);
}.
```

Published

```
printf("0 -->");
for (i = dloc+1; i<n; i++)
{
    printf("%d -->", d[i]);
}
    som = disk + Max;
printf("\n Movement of total cylinders %d",
    som);
return 0;
}
```

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