Ex. No.: 10b)
Date: 10|4|25

FIRST FIT

Aim:
To write a C program for implementation memory allocation methods for fixed partition using first fit.

Algorithm:

1. Define the max as 25.
2. Declare the variable frag[max],b[max],f[max],i,j,nb,nf,temp, highest=0, bf[max],ff[max]. 3: Get the number of blocks,files,size of the blocks using for loop.
4: In for loop check bf[j]!=1, if so temp=b[j]-f[i]
5: Check highest

Program Code:

```
#include < stdio.h>
int main(){
    int b[]={100,45, 33, 45, 70};
    int pro[]= {20, 30,50, 40, 10};
    int frag[5], flag[5];
    for( int i=0; i<5; i++)
    {
        frag [i] = 0;
        flag [i]= 0;
    }
    for( int i =0; i<5; i++)
    {  for( int j=0; j<5; j++)
       {
           if (pro[i] < b[j] && flag[j]==0)
           {
               frag[j] = b[j] - pro[i];
               flag [j] =1;
               break;
           }
       }
    }
}
```

```c
printf(" The fragments of the blocks are :\n");

for( int i=0; i<5; i++)
        printf("%d\n", frag[i]);
}
```

OUTPUT :

The fragments of the blocks are :
80
15
23
5
20.

Process No	Process size	Block no	Fragment
P1	20	1	80
P2	30	2	15
P3	50	5	20
P4	40	4	5
P5	10	3	23

Sample Output:

```
Enter the number of blocks:4
Enter the number of files:3

Enter the size of the blocks:-
Block 1:5
Block 2:8
Block 3:4
Block 4:10
Enter the size of the files:-
File 1:1
File 2:4
File 3:7

File_no:         File_size :     Block_no:       Block_size:     Fragment
1                1               1               5               4
2                4               2               8               4
3                7               4               10              3
```

Result: Using C the first fit memory allocation
algorithm is implemented.