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

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]==
        {
            frag[j] = b[j] - pro[i];
            flag[j]=1;
            break;
        }
    }
}
```

```
Printf("The fragments of blocks are :\n");
for(int i=0; i<5; i++)
  {
    printf("%d\n", frag[i]);
  }
```

Output:

The fragment of blocks are:

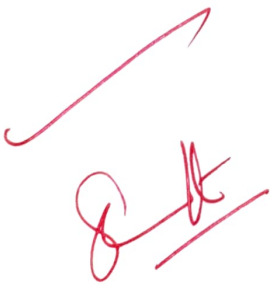
80
15
23
5
20

Process No	Process_size	Block_No	Fragment
P_1	20	1	30
P_2	30	2	15
P_3	50	5	20
P_4	40	4	5
P_5	10	3	23

```
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 program the first fit memory allocation algorithm is implemented