S.No: 10	Exp. Name: ***Write a program to Implementation of contiguous memory fixed partition technique(MFT)***	Date: 2022-05-06

Aim:

Write a program to Implementation of contiguous memory fixed partition technique(MFT)

Source Code:

fixedPartitionTechnique.c

```
#include<stdio.h>
#include<conio.h>
int main(){
   int m,p,s,p1;
   int m1[4],i,f,f1=0,f2=0,fra1,fra2,s1,pos;
   printf("Enter the memory size:");
   scanf("%d",&m);
   printf("Enter the no of partitions:");
   scanf("%d",&p);
   s=m/p;
   printf("Each partn size is:%d",s);
   printf("Enter the no of processes:");
   scanf("%d",&p1);
   pos=m;
   for(i=0; i<p1; i++){
      printf("Enter the memory req for process%d:",i+1);
      scanf("%d",&m1[i]);
      if(m1[i]<=s){
         printf("Process is allocated in partition%d\n",i+1);
         fra1=s-m1[i];
         printf("Internal fragmentation for process is:%d\n",fra1);
         f1=f1+fra1;
         pos=pos-s;
      }
      else{
         printf("Process not allocated in partition%d\n",i+1);
         s1=m1[i];
         while(s1>s){
            s1=s1-s;
            pos=pos-s;
         }
         pos=pos-s;
         fra2=s;
         f2=f2+fra2;
         printf("External fragmentation for partition is:%d",fra2);
\
      }
   }
   printf("Process\tmemory\tallocatedmemory");
   for(i=0;i<p1;i++)
   printf("\n%5d\t%5d\t%5d",i+1,s,m1[i]);
   f=f1+f2;
   printf("\nThe tot no of fragmentation is:%d",f);
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
Enter the memory size: 500
Enter the no of partitions: 4
Each partn size is:125Enter the no of processes: 4
Enter the memory req for process1: 100
Process is allocated in partition1 200
Internal fragmentation for process is:25 200
Enter the memory req for process2: 200
Process not allocated in partition2 100
External fragmentation for partition is:125Enter the memory req for process3: 100
Process is allocated in partition3 50
Internal fragmentation for process is:25 50
Enter the memory req for process4: 50
Process is allocated in partition4
Internal fragmentation for process is:75
Process memory allocatedmemory
1 125 100
2 125 200
3 125 100
4 125 50
The tot no of fragmentation is:250