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

Aim:

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

Source Code:

fixedPartitionTechnique.c

```
#include<stdio.h>
#include<conio.h>
void main()
{
   int i,mem_size,no_pro,no_par,mem_req[10],prn_size,fragmentation=0,temp;
   printf("Enter the memory size:");
   scanf("%d",&mem_size);
   printf("Enter the no of partitions:");
   scanf("%d",&no_par);
   prn_size = mem_size/no_par;
   printf("Each partn size is:%d",prn_size);
   printf("Enter the no of processes:");
   scanf("%d",&no_pro);
   for(i=0;i<no_pro;i++)
   {
      printf("Enter the memory req for process%d:",i+1);
      scanf("%d",&mem_req[i]);
      if(mem_req[i]<=prn_size)
      {
         printf("Process is allocated in partition%d\n",i+1);
         temp=prn_size-mem_req[i];
         printf("Internal fragmentation for process is:%d\n",temp);
         fragmentation+=temp;
      }
      else
      {
         printf("Process not allocated in partition%d\n",i+1);
         printf("External fragmentation for partition is:%d",prn_size);
         fragmentation+=prn_size;
      }
   }
   printf("Process\tmemory\tallocatedmemory\n");
   for(i=0;i<no_pro;i++)
   {
      if(mem_req[i]<100)
      printf("%5d\t%5d\t%5d\n",i+1,prn_size,mem_req[i]);
      else
      printf("%5d\t%5d\t%5d\n",i+1,prn_size,mem_req[i]);
   }
   printf("The tot no of fragmentation is:%d",fragmentation);
}
```

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