S.No: 11	Exp. Name: ***Write a program to Implementation of contiguous memory Variable partition technique (MVT)***	Date: 2022-05-06

Aim:

Write a program to Implementation of contiguous memory Variable partition technique (MVT)

Source Code:

VariablePartition.c

```
#include<stdio.h>
#include<conio.h>
int main(){
   int m=0,m1=0,m2=0,p,count=0,i;
   printf("enter the memory capacity:");
   scanf("%d",&m);
   printf("enter the no of processes:");
   scanf("%d",&p);
   for(i=0;i<p;i++)
   {
      printf("enter memory req for process%d:",i+1);
      scanf("%d",&m1); count=count+m1;
      if(count==m)
      printf("there is no further memory remaining:\n");
      else if(m1<m){
         printf("the memory allocated for process%d is: %d ",i+1,m); m2=m-m1;
         printf("\nremaining memory is: %d\n",m2);
         m=m2;
      }
      else {
         printf("memory is not allocated for process%d",i+1);
      } printf("external fragmentation for this process is:%d\n",m2);
   } return 0;
}
```

Execution Results - All test cases have succeeded!

Test Case - 1
User Output
enter the memory capacity: 500
enter the no of processes: 2
enter memory req for process1: 250
the memory allocated for process1 is: 500 50
remaining memory is: 250 50
external fragmentation for this process is:250 50
enter memory req for process2: 50
the memory allocated for process2 is: 250
remaining memory is: 200
external fragmentation for this process is:200

Test Case - 2

Test Case - 2
User Output
enter the memory capacity: 250
enter the no of processes: 2
enter memory req for process1: 250
there is no further memory remaining: 120
external fragmentation for this process is:0 120
enter memory req for process2: 120
the memory allocated for process2 is: 250
remaining memory is: 130
external fragmentation for this process is:130

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