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

Aim:

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

Source Code:

VariablePartition.c

```
#include<stdio.h>
#include<conio.h>
void main()
{
   int i=0,memcap,nop,memreq,temp=0,memrem=0;
   printf("enter the memory capacity:");
   scanf("%d",&memcap);
   printf("enter the no of processes:");
   scanf("%d",&nop);
   memrem=memcap;
   while(nop>0)
   {
      printf("enter memory req for process%d:",i+1);
      scanf("%d",&memreq);
      temp=memreq;
      if(temp<memcap)
      {
         printf("the memory allocated for process%d is: %d \n",i+1,memrem);
         memrem=memrem-temp;
         printf("remaining memory is: %d\n",memrem);
         printf("external fragmentation for this process is:%d\n",memrem);
      }
      else
      {
         printf("there is no further memory remaining:\n");
         printf("external fragmentation for this process is:0\n");
      }
      i++;
      nop--;
   }

}
```

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

Test Case - 1
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
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