**4. Write a C program to implement the first-fit algorithm for memory management.**

**Test Case:**

**Memory partitions: 300 KB, 600 KB, 350 KB, 200 KB, 750 KB, and 125 KB (in order) Show the outcome for the test case with first-fit algorithms to place the processes of size 115 KB, 500 KB, 358 KB, 200 KB, and 375 KB (in order)**

Program :

#include<stdio.h>

int main()

{

int m1,p1,i,j;

printf("enter the number of memory partitions : ");

scanf("%d",&m1);

printf("Enter the number of process : ");

scanf("%d",&p1);

int m[m1],p[p1];

printf("enter the memory partitions : \n");

for(i=0;i<m1;i++){

scanf("%d",&m[i]);

}

printf("enter the processes : \n");

for(i=0;i<p1;i++){

scanf("%d",&p[i]);

}

i=0;

while(i<p1){

for(j=0;j<m1;j++){

if(p[i]<=m[j]){

printf("%d is partitioned at %d \n",p[i],m[j]);

m[j]=m[j]-p[i];

i=i+1;

}

}

}

