**OPERATING SYSTEM - CS23431**

**EXP 10(B)**

**FIRST FIT**

**NAME: V.MAHALAKSHMI ROLL NO: 230701171**

**PROGRAM:**

#include<stdio.h>

int main(){

int n1;

printf("Enter memory block size: ");

scanf("%d",&n1);

int mem[n1];

printf("Enter value of memory blocks: ");

for(int i=0;i<n1;i++){

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

}

int n2;

printf("Enter process block size: ");

scanf("%d",&n2);

int p[n2];

printf("Enter values of process blocks: ");

for(int i=0;i<n2;i++){

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

}

int frag[n1],alloc[n2],emp[n1],allocsize[n2];

for(int i=0;i<n1;i++){

emp[i]=1;

}

for(int i=0;i<n2;i++){

alloc[i]=-1;

}

for(int i=0;i<n2;i++){

for(int j=0;j<n1;j++){

if(emp[j] && mem[j]>=p[i]){

alloc[i]=j;

allocsize[i]=mem[j];

frag[i]=mem[j]-p[i];

emp[j]=0;

break;

}

}

}

printf("FileNo\tFilesize\tBlockNo\tBlocksize\tFragment\t\n");

for(int i=0;i<n2;i++)

{

printf("%d\t%d\t%d\t%d\t%d\n",i,p[i],alloc[i],allocsize[i],frag[i]);

}

}

**OUTPUT:**