Ex. No.: 10b)
Date: 11/4/25

FIRST FIT

Aim:

To write a C program for implementation memory allocation methods for fixed partition using first fit.

Algorithm:

1. Define the max as 25.
2: Declare the variable frag[max],b[max],f[max],i,j,nb,nf,temp, highest=0, bf[max],ff[max]. 3: Get the number of blocks,files,size of the blocks using for loop.
4: In for loop check bf[j]!=1, if so temp=b[j]-f[i]
5: Check highest

Program Code:

```
# Include < stdio.h>
int main () {
  int n, m;
  Scanf ("%d", &n);
  Scanf ("%d", &m);
  int block [n];
  int process [m];
  int allocation [m];
  for (int i=0; i<m; i++) {
        allocation [i] = -1;
  }.
  int occupied [n];
  for (int i=0; i<n; i++)
  {
     occupied [i] = 0;
  }
```

```
for ( int i=0 ; i<n ; i++) {
    Scanf ("%d", &block[i]);
}
for (int i=0 ; i<m ; i++) {
    scanf ("%d", &process[i]);
}
for ( int i=0 ;i<m ;i++)
{
  for (int j=0; j<n ; j++)
 {
  if ( ! occupied[j] && block[j] >= process[i])
  {
    allocation[i] = j ;
    occupied [j] =1 ;
    blocks [j] = process[i] ;
    printf ("%d", blocks[j]);
     break ;
  }
 }
}
printf ("\n Process No    Processize        Block No");
for (int i=0 ; i<m ; i++)
{
  if (allocation [i] != -1)
  {
   Printf ("\n%d \t \t %d \t \t%d", i+1, process [i];
    allocation[i]+1);
  } else {
    printf ("\n %d \t \t %d \t \t Not allocated", i+1);
    process[i]);
  }
}
```

Output :-

Enter no of blocks : 4

Block size :

B1 - 100

B2 - 500

B3 - 150

B4 - 300

Enter no of processes : 3

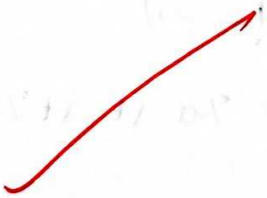
Process size :

P1 - 99

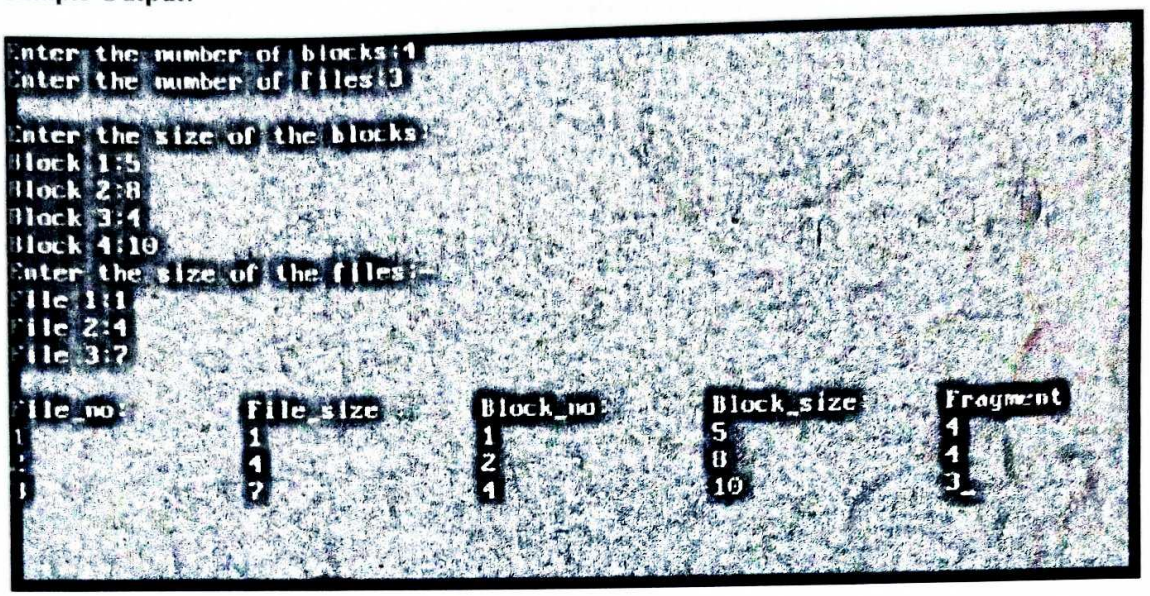
P2 - 211

P3 - 300

Process No	Process Size	Block No
P1	99	B1
P2	211	B2
P3	300	B4



Sample Output:



Result:

Hence First Fit memory management has been successfully executed.