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:

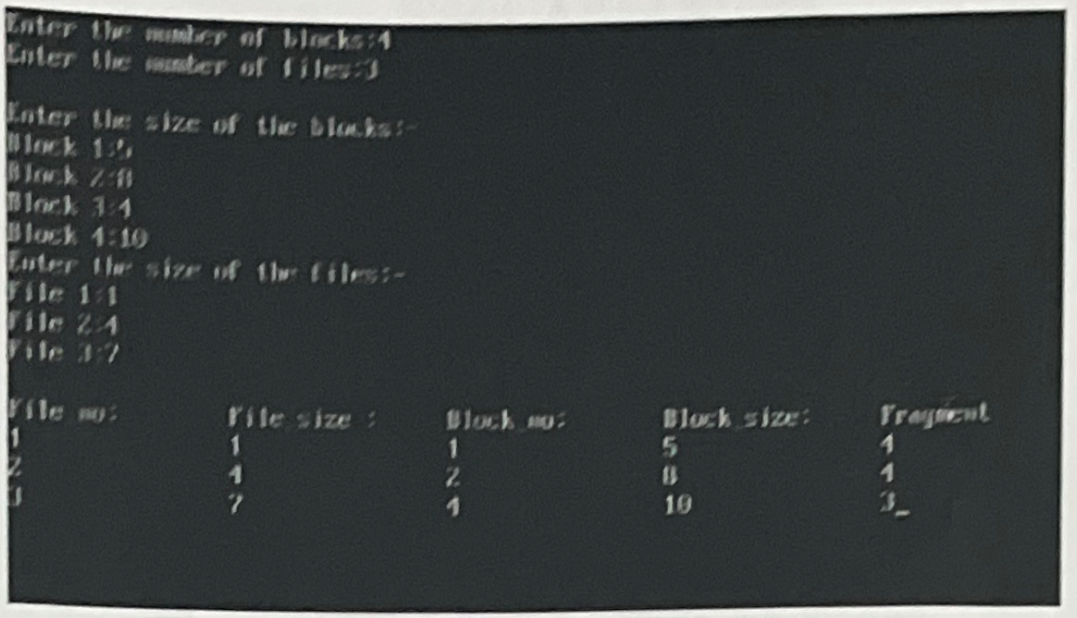
1. Define the max as 25.
2: Declare the variable frag[max],b[max],f[max],i,j,nb,nf,temp, highest=0, bf[max],ff[max]. 3: Get the number of blocks,files,size of the blocks using for loop.
4: In for loop check bf[j]!=1, if so temp=b[j]-f[i]
5: Check highest

Program Code:

```
include <stdio.h>
int main(){
  int n, m frag[max], b[max], f[max], i, j, nb,
  Stati int bf[max], ff[max];
  printF ("Enter number of blocks: ");
  Scanf ("%d", &nb);
  printF ("\n Enter size of each block:\n");
  for(i=0; i<nb; i++){
      printF ("Block %d = ", i+1);
      scanf("%d", &b[i]);
  }
  printF ("\n Enter size of each file = \n");
  for(i=0; i<nF / i++){
      printf("file %d = " i+1);
      Scanf ("%d", &F[i]);
  }
```

```
for (i=0; i<nF; i++){
    for(j=0; j<nb; j++){
        if(bf[j]==0 && b[j]>=f[i]){
            ff[i]=j;
            frag[i]=b[j]-f[i];
            bf[j]=1;
            break;
        }
    }
    if(j==nb){
        ff[i]=-1;
        frag[i]=-1;
    }
}
printf("\nFile No\tFile size\tBlock No\tBlock size\tFragment\n");
for(i=0; i<nf; i++){
    if(ff[i]!=-1){
        printf("%d\t%d\t%d\t%d\t%d\t%d\n",
        i+1, f[i], ff[i]+1, b[ff[i]], frag[i]);
    }
    else{
        printf("%d\t%d\tNot located\n",
        i+1, f[i]);
    }
}
return 0;
}
```

Sample Output:



Result: C program for complementation of First Fit memory allocation has been executed Successfully.