

OPERATING SYSTEM - CS23431

EXP 10(b)

FIRST FIT

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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\t\n",i,p[i],alloc[i],allocsize[i],frag[i]);
}
}

```

#### OUTPUT

```

Enter memory block size: 4
Enter value of memory blocks: 5
8
1
10
Enter process block size: 3
Enter values of process blocks: 1
4
7

```

FileNo	Filesize	BlockNo	Blocksize	Fragment
0	1	0	5	4
1	4	1	8	4
2	7	3	10	3