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Roll no. TCOB26

Best fit

```
import java.util.*;
```

```
public class Best_fit
```

```
{
```

```
    public static void main(String args[])
```

```
    {
```

```
        Scanner sc=new Scanner(System.in);
```

```
        System.out.println("Enter no. of jobs: ");
```

```
        int n=sc.nextInt();
```

```
        int req[]=new int[n];
```

```
        int job[]=new int[n];
```

```
        System.out.println("Enter no. of blocks: ");
```

```
        int m=sc.nextInt();
```

```
        int b[]=new int[m];
```

```
        int avl[]=new int[m];
```

```
        int f[]=new int[m];
```

```
        int temp;
```

```
        for(int i=0;i<n;i++)
```

```
        {
```

```
            System.out.println("Enter memory requirement for job "+(i+1)+" : ");
```

```
            req[i]=sc.nextInt();
```

```
            job[i]=(i+1);
```

```
        }
```

```
        System.out.println();
```

```
        for(int i=0;i<m;i++)
```

```

{
    System.out.println("Enter memory available for block "+(i+1)+" : ");
    avl[i]=sc.nextInt();
    b[i]=(i+1);
}

```

```

System.out.println("MEMORY REQUIREMENT:");
System.out.println("JOB\t M_REQUIREMENT");
for(int i=0;i<n;i++)
{
    System.out.print(job[i]+"\\t"+req[i]);
    System.out.println();
}

```

```

System.out.println();
System.out.println("MEMORY AVAILABLE:");
System.out.println("BLOCK\t M_AVAILABLE");
for(int i=0;i<m;i++)
{
    System.out.print(b[i]+"\\t"+avl[i]);
    System.out.println();
}

```

```

for (int i=0;i<n;i++)
{
    f[i]= 0;
}

```

```

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

```

```

        for(int j=0; j < n-(i+1) ; j++)
        {
            if(avl[j] > avl[j+1])
            {
                temp=avl[j];
                avl[j]=avl[j+1];
                avl[j+1]=temp;
                temp=b[j];
                b[j]=b[j+1];
                b[j+1]=temp;
            }
        }
    }
}

```

```

System.out.println("JOB\t\t BLOCK");
for(int i=0;i<n;i++)
{
    for(int j=0;j<m;j++)
    {
        if(req[i]<=avl[j] && f[j]==0)
        {
            f[j]=1;
            System.out.println(job[i]+"t-->" +b[j]);
            break;
        }
    }
}
sc.close();

```

```

}

```

}

OUTPUT

```
eclipse-workspace - fcf/src/Best_fit.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
Problems Javadoc Declaration Console X Debug
<terminated> Best_fit [Java Application] C:\Program Files\Java\jdk-18.0.2\bin\javaw.exe (26-Sep-2022, 5:36:52 pm - 5:38:32 pm) [pid: 18012]

Enter no. of jobs:
4
Enter no. of blocks:
5
Enter memory requirement for job 1 :
219
Enter memory requirement for job 2 :
411
Enter memory requirement for job 3 :
119
Enter memory requirement for job 4 :
456

Enter memory available for block 1 :
100
Enter memory available for block 2 :
500
Enter memory available for block 3 :
200
Enter memory available for block 4 :
300
Enter memory available for block 5 :
600
MEMORY REQUIREMENT:
JOB      M_REQUIREMENT
1        219
2        411
3        119
4        456

MEMORY AVAILABLE:
```

```
eclipse-workspace - fcf/src/Best_fit.java - Eclipse IDE
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Enter memory available for block 1 :
100
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200
Enter memory available for block 4 :
300
Enter memory available for block 5 :
600
MEMORY REQUIREMENT:
JOB      M_REQUIREMENT
1        219
2        411
3        119
4        456

MEMORY AVAILABLE:
BLOCK    M_AVAILABLE
1        100
2        500
3        200
4        300
5        600
JOB      BLOCK
1        -->4
2        -->2
3        -->3
4        -->5
```