

Program:

```
import java.util.Scanner;

public class BestFit {

    static void bestFit(int blockSize[], int m, int processSize[],int n,int remblockSize[])
    {

        int allocation[] = new int[n];

        for (int i = 0; i < allocation.length; i++) {
            allocation[i] = -1; }

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

            int bestIdx = -1;

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

                if (blockSize[j] >= processSize[i])
                {

                    if (bestIdx == -1)

                        bestIdx = j;

                    else if (blockSize[bestIdx] > blockSize[j])

                        bestIdx = j;

                }}

            if (bestIdx != -1)
            {

                allocation[i] = bestIdx;

                blockSize[bestIdx] -= processSize[i];

                remblockSize[i]=blockSize[bestIdx];

            }}

        System.out.println("\nProcess No.\tProcess Size\tBlock no.\tRemaninig Block Size");

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

            System.out.print(" " + (i+1) + "\t\t" + processSize[i] + "\t\t");

            if (allocation[i] != -1) {

                System.out.print((allocation[i] + 1)+"\t\t"+remblockSize[i]); }

            else {

                System.out.print("Not Allocated"+" \t"+remblockSize[i]); }

            System.out.println();}}

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

```

int m,n,num;
Scanner in=new Scanner(System.in);
System.out.print("Enter how many number of blocks you want to enter:");
m=in.nextInt();
int remblockSize[]=new int[m];
int blockSize[]=new int[m];
for(int i=0;i<m;i++) {
    System.out.print("Enter Data "+(i+1)+":");
    num=in.nextInt();
    blockSize[i]=num;
}
System.out.print("Enter how many number of process you want to enter:");
n=in.nextInt();
int processSize[]=new int[n];
for(int i=0;i<n;i++) {
    System.out.print("Enter Data "+(i+1)+":");
    num=in.nextInt();
    processSize[i]=num;
}
bestFit(blockSize, m, processSize, n,remblockSize); }}

```

Output:

Enter how many number of blocks you want to enter:4

Enter Data 1:10

Enter Data 2:15

Enter Data 3:15

Enter Data 4:15

Enter how many number of process you want to enter:4

Enter Data 1:10

Enter Data 2:15

Enter Data 3:14

Enter Data 4:16

Process No.	Process Size	Block no.	Remaninig Block Size
1	10	1	0
2	15	2	0
3	14	3	1
4	16	Not Allocated	0