

```
(base) cse@itlab1-01:~$ cd 20wh1a1295
(base) cse@itlab1-01:~/20wh1a1295$ gedit ba.c
(base) cse@itlab1-01:~/20wh1a1295$ gcc ba.c
(base) cse@itlab1-01:~/20wh1a1295$ ./a.out

Enter number of process:5
Enter number of resources:3
Enter total numbers of each resources:10 5 7
Enter Max resources for each process:
for process 1:7 5 3
for process 2:3 2 2
for process 3:9 0 2
for process 4:2 2 2
for process 5:4 3 3
Enter allocated resources for each process:
for process 1:0 1 0
for process 2:2 0 0
for process 3:3 0 2
for process 4:2 1 1
for process 5:0 0 2
available resources:
3      3      2
Allocated matrix Max need
0  1  0|  7  5  3|  7  4  3
2  0  0|  3  2  2|  1  2  2
3  0  0|  0  0  0|  6  0  0
```

```

0 0 2 4
Process 2 completed

```

Allocated matrix Max need

```

0 0 2 4
Process 4 completed

```

Allocated matrix Max need

```

0 0 2 4
Process 1 completed

```

Allocated matrix Max need

Process 3 completed

Allocated matrix Max need

0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	0	0	0	0	0	0	0
0	0	2	4	3	3	4	3	1

```
Activities Terminal Jul 5 16:17 cse@itlab1-01: ~/20wh1a1295

3 0 2| 9 0 2| 6 0 0
2 1 1| 2 2 2| 0 1 1
0 0 2| 4 3 3| 4 3 1

Process 2 completed
Available matrix: 5 3 2
Allocated matrix Max need
0 1 0| 7 5 3| 7 4 3
0 0 0| 0 0 0| 0 0 0
3 0 2| 9 0 2| 6 0 0
2 1 1| 2 2 2| 0 1 1
0 0 2| 4 3 3| 4 3 1

Process 4 completed
Available matrix: 7 4 3
Allocated matrix Max need
0 1 0| 7 5 3| 7 4 3
0 0 0| 0 0 0| 0 0 0
3 0 2| 9 0 2| 6 0 0
0 0 0| 0 0 0| 0 0 0
0 0 2| 4 3 3| 4 3 1

Process 1 completed
Available matrix: 7 5 3
Allocated matrix Max need
0 0 0| 0 0 0| 0 0 0
0 0 0| 0 0 0| 0 0 0
3 0 2| 9 0 2| 6 0 0
0 0 0| 0 0 0| 0 0 0
0 0 2| 4 3 3| 4 3 1

Process 3 completed
Available matrix: 10 5 5
Allocated matrix Max need
0 0 0| 0 0 0| 0 0 0
0 0 0| 0 0 0| 0 0 0
0 0 0| 0 0 0| 0 0 0
0 0 0| 0 0 0| 0 0 0
0 0 2| 4 3 3| 4 3 1

Process 5 completed
Available matrix: 10 5 7
The system is in a safe state!!(base) cse@itlab1-01:~/20wh1a1295
```