

```
1 import java.util.Scanner;
2
3 public class roundr {
4
5     public static void main(String[] args) {
6         Scanner s = new Scanner(System.in);
7
8         int wtime[], btime[], rtime[], num, quantum;
9         wtime = new int[10]; // Waiting times (not fully used in this code)
10        btime = new int[10]; // Burst times
11        rtime = new int[10]; // Remaining times
12
13        // Step 1: Input number of processes
14        System.out.print("Enter number of processes (MAX 10): ");
15        num = s.nextInt();
16
17        // Step 2: Input burst times
18        System.out.print("Enter burst time for each process:");
19        for (int i = 0; i < num; i++) {
20            System.out.print("\nP[" + (i + 1) + "]: ");
21            btime[i] = s.nextInt();
22            rtime[i] = btime[i]; // Initially, remaining time = burst time
23            wtime[i] = 0;
24        }
25
26        // Step 3: Input time quantum
27        System.out.print("\nEnter quantum: ");
28        quantum = s.nextInt();
29
30        // Step 4: Round Robin Scheduling logic
31        int rp = num; // Remaining processes
32        int i = 0; // Process index
33        int time = 0; // Current time
34
35        System.out.print("\nGantt Chart:\n");
36        System.out.print(time);
37
38        while (rp != 0) {
39            if (rtime[i] > quantum) {
40                // Process executes for full quantum
41                rtime[i] -= quantum;
42                time += quantum;
43                System.out.print(" | P[" + (i + 1) + "] | " + time);
44            }
45        }
46    }
47}
```

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44
45     }
46     else if (rtime[i] > 0) {
47         // Process executes for remaining time
48         time += rtime[i];
49         rtime[i] = 0;
50         rp--;    // One process finished
51         System.out.print(" | P[" + (i + 1) + "] | " + time);
52     }
53
54     i++;
55     if (i == num) {
56         i = 0; // Restart loop for Round Robin
57     }
58
59     s.close();
60 }
61 }
62

```

Output:



The screenshot shows the Eclipse IDE interface with the 'Console' tab selected. The output window displays the following text:

```

Problems @ Javadoc Declaration Console ×
terminated> roundr [Java Application] /snap/eclipse/124/usr/lib/eclipse/plugins/org.eclipse.justj.openjdk.hotspot.jre.full.linux.x86_64_21.0.7.v2
Enter number of processes(MAX 10): 3
Enter burst time
P[1]: 8
P[2]: 6
P[3]: 7

Enter quantum: 3
0 | P[1] | 3 | P[2] | 6 | P[3] | 9 | P[1] | 12 | P[2] | 15 | P[3] | 18 | P[1] | 20 | P[3] | 21

```