

```

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);

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

```

Output:

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<terminated> roundr [Java Application] /snap/eclipse/124/usr/lib/eclipse/plugins/org.eclipse.justj.openjdk.hotspot.jre.full.linux.x86_64_21.0.7.v
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

```