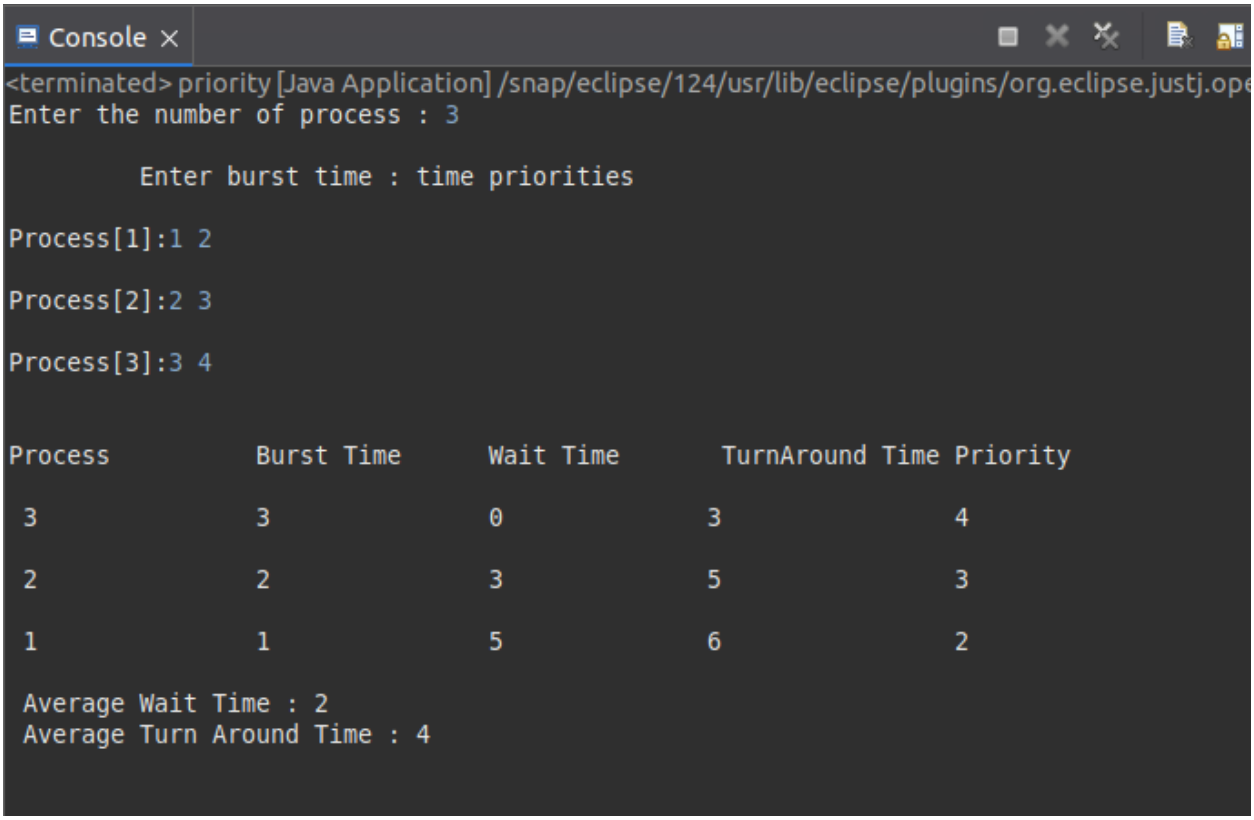
```java
import java.util.Scanner;

public class priority {

   public static void main(String[] args) {
      Scanner s = new Scanner(System.in);

      int n, x;
      int[] p, pp, bt, w, t;
      int awt = 0, atat = 0;

      p = new int[10];   // Process IDs
      pp = new int[10];  // Priorities
      bt = new int[10];  // Burst times
      w = new int[10];   // Waiting times
      t = new int[10];   // Turnaround times

      // Step 1: Input number of processes
      System.out.print("Enter the number of processes: ");
      n = s.nextInt();

      // Step 2: Input burst times & priorities
      System.out.println("\nEnter burst time and priority for each process:");
      for (int i = 0; i < n; i++) {
         System.out.print("Process[" + (i + 1) + "] (BurstTime Priority): ");
         bt[i] = s.nextInt();
         pp[i] = s.nextInt();
         p[i] = i + 1;
      }

      // Step 3: Sort by Priority (higher number = higher priority)
      for (int i = 0; i < n - 1; i++) {
         for (int j = i + 1; j < n; j++) {
            if (pp[i] < pp[j]) {
               // Swap priority
               x = pp[i]; pp[i] = pp[j]; pp[j] = x;

               // Swap burst time
               x = bt[i]; bt[i] = bt[j]; bt[j] = x;

               // Swap process ID
               x = p[i]; p[i] = p[j]; p[j] = x;
```

```
            }
          }
        }

        // Step 4: Calculate Waiting Time & Turnaround Time
        w[0] = 0;     // First process waiting time = 0
        t[0] = bt[0];  // First process TAT = its burst time

        atat = t[0];   // Initialize ATAT with first TAT

        for (int i = 1; i < n; i++) {
            w[i] = t[i - 1];        // Waiting time = previous TAT
            awt += w[i];            // Add to total AWT
            t[i] = w[i] + bt[i];    // TAT = WT + BT
            atat += t[i];           // Add to total ATAT
        }

        // Step 5: Display Results
        System.out.println("\nProcess\tBurst Time\tWait Time\tTurnaround Time\tPriority");

        for (int i = 0; i < n; i++) {
            System.out.println("P" + p[i] + "\t\t" + bt[i] + "\t\t" + w[i] + "\t\t" + t[i] + "\t\t" + pp[i]);

        }

        // Step 6: Calculate & Display Averages
        awt /= n;
        atat /= n;
        System.out.println("\nAverage Waiting Time: " + awt);
        System.out.println("Average Turnaround Time: " + atat);

        s.close();
    }
}
```

**Output:**


Console
<terminated> priority [Java Application] /snap/eclipse/124/usr/lib/eclipse/plugins/org.eclipse.justj.ope
Enter the number of process : 3
Enter burst time : time priorities
Process[1]:1 2
Process[2]:2 3
Process[3]:3 4
Process Burst Time Wait Time TurnAround Time Priority
3 3 0 3 4
2 2 3 5 3
1 1 5 6 2
Average Wait Time : 2
Average Turn Around Time : 4