```java
import java.util.Scanner;
public class sjfpreemptive {
    public static void main(String[] args) {

        Scanner sc = new Scanner(System.in);
        System.out.println("Enter number of processes:");
        int n = sc.nextInt();
        int pid[] = new int[n];
        int at[] = new int[n];
        int bt[] = new int[n];
        int ct[] = new int[n];
        int tat[] = new int[n];
        int wt[] = new int[n];
        int bttt[] = new int[n];
        float atat = 0;
        float awt = 0;

        for (int i = 0; i < n; i++) {
            System.out.println("Enter the process id:");
            pid[i] = sc.nextInt();

            System.out.println("Enter the Arrival time:");
            at[i] = sc.nextInt();

            System.out.println("Enter the Burst time:");
            bt[i] = sc.nextInt();
            bttt[i] = bt[i];
        }
        int F[] = new int[n];
        for (int i = 0; i < n; i++) {
            F[i] = 0;
        }
        int st = 0;
        int total = 0;

        while (true) {
            int min = Integer.MAX_VALUE;
            int c = n;
            if (total == n)
                break;

            for (int i = 0; i < n; i++) {
                if (at[i] <= st && F[i] == 0 && min > bt[i]) {
                    min = bt[i];
                    c = i;
                }
            }
```

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            if (c == n) {
                st = st + 1;
            } else {
                bt[c]--;
                st++;
                if (bt[c] == 0) {
                    ct[c] = st;
                    total++;
                    F[c] = 1;
                }
            }
        }

        for (int i = 0; i < n; i++) {
            tat[i] = ct[i] - at[i];
            wt[i] = tat[i] - bttt[i];
            atat = atat + tat[i];
            awt = awt + wt[i];
        }

        System.out.println("PID\tAT\tBT\tCT\tTAT\tWT");
        for (int i = 0; i < n; i++) {
            System.out.println(pid[i] + "\t" + at[i] + "\t" + bttt[i] + "\t" +
ct[i] + "\t" + tat[i] + "\t" + wt[i]);
        }
        System.out.println("Average TAT and WT are: ");
        System.out.println("ATAT = " + (atat / n) + "\t" + "AWT = " + (awt /
n));
    }
}
```

OUTPUT-

```
5

Enter the process id:

1

Enter the Arrival time:

0

Enter the Burst time:

1

Enter the process id:

2

Enter the Arrival time:
```

```
3
Enter the Burst time:
6
Enter the process id:
3
Enter the Arrival time:
4
Enter the Burst time:
4
Enter the process id:
4
Enter the Arrival time:
6
Enter the Burst time:
5
Enter the process id:
5
Enter the Arrival time:
8
Enter the Burst time:
2
PID     AT      BT      CT      TAT     WT
1       0       1       1       1       0
2       3       6       15      12      6
3       4       4       8       4       0
4       6       5       20      14      9
5       8       2       10      2       0
Average TAT and WT are:
ATAT = 6.6      AWT = 3.0
```