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

Scanner sc = new Scanner(System.in);

        System.out.println("enter no. 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];
        int prio[] = 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];

            System.out.println("Enter the priority time");
            prio[i]=sc.nextInt();
        }

        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 = 99;
             int c = n;
             if(total == n)
```

```
                break;

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

            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];
        }

        for (int i = 0; i < n;i++)
        {
            System.out.println(pid[i] + "\t" + at[i]+ "\t" + bttt[i] + "\t" +
prio[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-

```
enter no. of processes:
6
Enter the process id:
1
Enter the Arrival time:
4
Enter the Burst time:
5
Enter the priority time
4
Enter the process id:
2
Enter the Arrival time:
4
Enter the Burst time:
10
Enter the priority time
3
Enter the process id:
3
Enter the Arrival time:
0
Enter the Burst time:
2
Enter the priority time
2
Enter the process id:
4
Enter the Arrival time:
```

```
3
Enter the Burst time:
1
Enter the priority time
6
Enter the process id:
5
Enter the Arrival time:
8
Enter the Burst time:
4
Enter the priority time
1
Enter the process id:
6
Enter the Arrival time:
6
Enter the Burst time:
2
Enter the priority time
5
1       4       5       4       23      19      14
2       4       10      3       18      14      4
3       0       2       2       2       2       0
4       3       1       6       4       1       0
5       8       4       1       12      4       0
6       6       2       5       25      19      17
Average TAT and WT are:
ATAT=9.833333   AWT5.8333335
```