```java
import java.util.Scanner;
public class priorityNP {
    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 prio[] = new int [n];
        int btt[] = 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();
            btt[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)
                {
                    c = i;
                    min = prio[i];
                }
            }
            if(c == n)
            {
                st = st + 1;
            }
            else
            {
                ct[c] = st + bt[c];
                F[c] = 1;
                st = ct[c];
                total++;
            }
        }

        for(int i = 0;i < n;i++)
        {
            tat[i] = ct[i] - at[i];
            wt[i] = tat[i] - btt[i];
            atat = atat + tat[i];
             awt = awt + wt[i];
        }
        System.out.println("PID \t AT \t BT \t PRIO \t CT \t TAT \t WT \t");
        for (int i = 0; i < n;i++)
        {
            System.out.println(pid[i] + "\t" + at[i]+ "\t" + bt[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-

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:

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

PID	AT	BT	PRIO	CT	TAT	WT
1	4	5	4	23	19	14
2	4	10	3	14	10	0
3	0	2	2	2	2	0
4	3	1	6	4	1	0
5	8	4	1	18	10	6
6	6	2	5	25	19	17

Average TAT and WT are:

ATAT=10.166667 AWT6.1666665