

Priority

```
import java.util.*;
public class PriorityNonPreemptive {
    public static void main(String[] args) {
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter no. of process : ");
        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 f[] = new int[n];
        int btt[] = new int[n];
        int prio[] = new int[n];
        for(int i=0; i<n; i++)
        {
            System.out.println("Enter process id: ");
            pid[i] = sc.nextInt();
            System.out.println("Enter Arrival time: ");
            at[i] = sc.nextInt();
            System.out.println("Enter Burst time: ");
            bt[i] = sc.nextInt();
            btt[i] = bt[i];
            System.out.println("Enter priority time: ");
            prio[i] = sc.nextInt();
            f[i] = 0;
        }
        sc.close();
        int st = 0;
        int total = 0;
        int i = 0;
        while(true)
        {
            if(total == n)
                break;
            int c = n;
            int min = 99;
            for( i = 0; i < n; i++)
            {
                if(at[i] <= st && f[i] == 0 && prio[i] < min)
                {
                    c = i;
                    min = prio[i];
                }
            }
            if(c == n)
                continue;
            st = at[c];
            total += bt[c];
            f[c] = 1;
            btt[c] -= bt[c];
            ct[c] = st - at[c];
            tat[c] = st;
            wt[c] = ct[c];
            i = 0;
        }
    }
}
```

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        {
            st += 1;
        }
        else
        {
            ct[c] = st + bt[c];
            f[c] = 1;
            st = ct[c];
            total++;
        }
    }

    for(int k = 0; k<n; k++)
    {
        tat[k] = ct[k] - at[k];
        wt[k] = tat[k] - btt[k];
    }
    for(int j = 0; j<n; j++)
    {
        System.out.println(pid[j]+"\\t"+at[j]+"\\t"+btt[j]+"\\t"+
prio[j]+"\\t"+ct[j]+"\\t"+tat[j]+"\\t"+wt[j]);
    }
}

```

OUTPUT:-

Enter no. of process :

3

Enter process id:

1

Enter Arrival time:

6

Enter Burst time:

8

Enter priority time:

2

Enter process id:

2

Enter Arrival time:

8

Enter Burst time:

0

Enter priority time:

1

Enter process id:

3

Enter Arrival time:

9

Enter Burst time:

3

Enter priority time:

6

| | | | | | | |
|---|---|---|---|----|---|---|
| 1 | 6 | 8 | 2 | 14 | 8 | 0 |
| 2 | 8 | 0 | 1 | 14 | 6 | 6 |
| 3 | 9 | 3 | 6 | 17 | 8 | 5 |