Priority

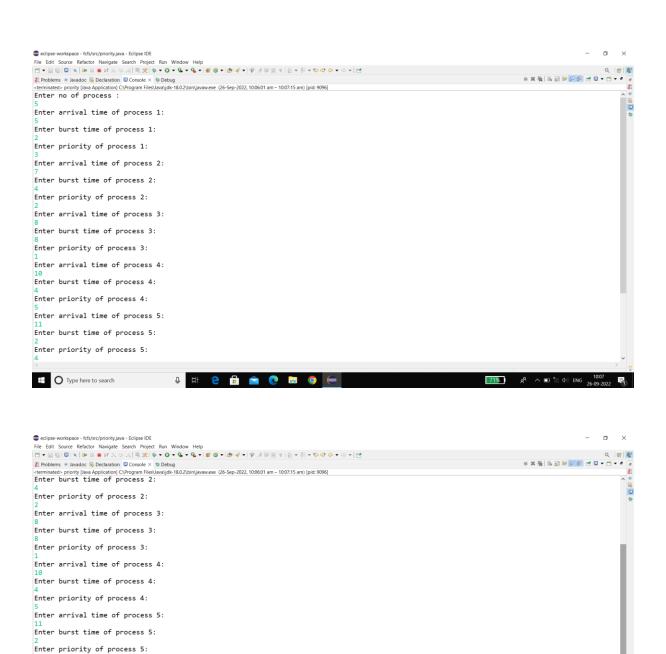
```
import java.util.*;
public class priority
{
     public static void main(String args[])
  {
      Scanner sc=new Scanner(System.in);
             System.out.println("Enter no of process: ");
             int n= sc.nextInt();
             int pid[] = new int[n];
             int at[] = new int[n];
             int bt[] = new int[n];
             int prio[] = new int[n];
             int ct[] = new int[n];
             int tat[] = new int[n];
             int wt[] = new int[n];
             int f[] = new int [n];
         int i,temp, st=0, tot=0;
         float avg_wt=0, avg_tat=0;
         for (i=0;i<n;i++)
         {
           pid[i]=i+1;
             System.out.println ("Enter arrival time of process" +(i+1)+":");
             at[i]= sc.nextInt();
             System.out.println("Enter burst time of process " +(i+1)+ ":");
             bt[i]= sc.nextInt();
             System.out.println("Enter priority of process " +(i+1)+ ":")
```

```
prio[i]= sc.nextInt();
   }
  for(i=0; i< n; i++)
       {
             for(int j=0; j< n-(i+1); j++)
              {
                    if (at[j] >= at[j+1])
                    {
                           temp = at[j];
                           at[j] = at[j+1];
                           at[j+1] = temp;
                           temp = bt[j];
                           bt[j] = bt[j+1];
                           bt[j+1] = temp;
                           temp = pid[j];
                           pid[j] = pid[j+1];
                           pid[j+1] = temp;
                           temp=prio[j];
                       prio[j]=prio[j+1];
                       prio[j+1]=temp;
                    }
              }
       }
   while(true)
       int min=99,c=n;
```

```
if (tot == n)
         break;
  for (i=0;i<n;i++)
   {
         if ((at[i]<=st) && (f[i]==0) && (bt[i]<min))
         {
                min=bt[i];
                c=i;
          }
   }
  if (c==n)
         st++;
  else
   {
         ct[c] = st+bt[c];
         st=st+bt[c];
         f[c]=1;
         tot++;
   }
  for(i=0; i< n; i++)
         {
                for(int j=0; j< n-(i+1); j++)
                {
                       if( st>at[j] && st>at[j+1] && f[j]==0)
```

```
{
                               if(prio[j]>prio[j+1])
                               temp = at[j];
                               at[j] = at[j+1];
                               at[j+1] = temp;
                               temp = bt[j];
                               bt[j] = bt[j+1];
                               bt[j+1] = temp;
                               temp = pid[j];
                               pid[j] = pid[j+1];
                               pid[j+1] = temp;
                               temp=prio[j];
                           prio[j]=prio[j+1];
                           prio[j+1]=temp;
                                }
                         }
                  }
           }
for(i=0; i< n; i++)
     {
 if( i == 0)
                  ct[i]=at[i]+bt[i];
           }
```

```
else
                    {
                           if( at[i]>ct[i-1])
                           {
                                  ct[i]= at[i] +bt[i];
                                  f[i]=1;
                           }
                           else
                           {
                                  ct[i]=ct[i-1]+bt[i];
                                  f[i]=1;
                           }
                    }
                    tat[i] = ct[i] - at[i];
                    wt[i] = tat[i] - bt[i];
                    avg_wt += wt[i];
                    avg_tat += tat[i];
      System.out.println("Pid\tAT\tBT\tPRIO\tCT\tTAT\tWT\n");
             for(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.print("\n Average Wait Time : "+avg_wt/n);
             System.out.print("\n Average Turn Around Time : "+avg_tat/n);
  }
}
```



Pid

АТ

11

вт

Average Wait Time: 4.4
Average Turn Around Time: 8.4

Type here to search

PRIO

СТ

7 11

19 21 25 TAT

11 10 15

J # 2

WT