

## CPU SCHEDULING ALGORITHMS

### 3. Priority Non-Preemption

```
#include<stdio.h>
main()
{
int n;
printf("Enter the no. of processes: ");
scanf("%d",&n);
int id[n],bt[n],wt[n],tat[n],p[n],i,j,temp;
for(i=0;i<n;i++)
{
    id[i] = i+1;
    printf("\n\nProcess %d : \n",id[i]);
    printf("\nBurst time: ");
    scanf("%d",&bt[i]);
    printf("Priority: ");
    scanf("%d",&p[i]);
}
for(i=0;i<n;i++)
{
    for(j=i+1;j<n;j++)
    {
        if(p[i]>p[j])
        {
            temp=p[i];
            p[i]=p[j];
            p[j]=temp;

            temp=bt[i];
            bt[i]=bt[j];
            bt[j]=temp;

            temp=id[i];
            id[i]=id[j];
            id[j]=temp;
        }
    }
    wt[i]=0;
}
for(i=0;i<n;i++)
{
    for(j=0;j<i;j++)
    {
        wt[i]=wt[i]+bt[j];
    }
    tat[i]=wt[i]+bt[i];
}
float avwt=0,avtat=0;
printf("\n\n\nProcess\tP\tBT\tWT\tTAT\n");
for(i=0;i<n;i++)
{
    printf("%d\t%d\t%d\t%d\t%d\t\n",id[i],p[i],bt[i],wt[i],tat[i]);
    avwt=avwt+wt[i];
    avtat=avtat+tat[i];
}
```

```
avwt=avwt/n;
avtat=avtat/n;
printf("Average Waiting Time: %f\n",avwt);
printf("\nAverage Turnaround Time: %f",avtat);
}
```