

```
import java.util.Scanner;

class SJF{
    public static void main(String args[]){
        int burst_time[],process[],waiting_time[],tat[],i,j,n,total=0,pos,temp;
        float wait_avg,TAT_avg;

        Scanner s = new Scanner(System.in);

        System.out.print("Enter number of process: ");

        n = s.nextInt();

        process = new int[n];
        burst_time = new int[n];
        waiting_time = new int[n];
        tat = new int[n];

        System.out.println("\nEnter Burst time:");

        for(i=0;i<n;i++)
        {
            System.out.print("\nProcess["++(i+1)+": ");
            burst_time[i] = s.nextInt();
            process[i]=i+1; //Process Number
        }

        //Sorting

        for(i=0;i<n;i++)
        {
            pos=i;
            for(j=i+1;j<n;j++)
            {
                if(burst_time[j]<burst_time[pos])
                    pos=j;
            }
            temp=burst_time[i];
            burst_time[i]=burst_time[pos];
            burst_time[pos]=temp;
        }
    }
}
```

```

burst_time[i]=burst_time[pos];
burst_time[pos]=temp;
temp=process[i];
process[i]=process[pos];
process[pos]=temp;
}

//First process has 0 waiting time
waiting_time[0]=0;
//calculate waiting time
for(i=1;i<n;i++)
{
waiting_time[i]=0;
for(j=0;j<i;j++)
waiting_time[i]+=burst_time[j];
total+=waiting_time[i];
}
//Calculating Average waiting time
wait_avg=(float)total/n;
total=0;
System.out.println("\nProcess\t Burst Time \tWaiting Time\tTurnaround Time");
for(i=0;i<n;i++)
{
tat[i]=burst_time[i]+waiting_time[i]; //Calculating Turnaround
//Timetotal+=tat[i];
System.out.println("\n p"+process[i]+"\t\t "+burst_time[i]+"\t\t"+waiting_time[i]+"\t\t "+tat[i]);
}
//Calculation of Average Turnaround Time
TAT_avg=(float)total/n;
System.out.println("\n\nAverage Waiting Time: "+wait_avg);

```

```
System.out.println("\nAverage Turnaround Time: "+TAT_avg);
}}}
```