

## PRACTICAL\_FCFS

```
import java.util.*;
public class fcfs {

    public static void main(String[] args) {

        Scanner sc=new Scanner(System.in);
        System.out.println("Enter the number 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];
        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 bus time");
            bt[i]=sc.nextInt();

        }

        for(int i=0;i<n;i++)
        {

            if(i==0)
            {
                ct[i]=bt[i]+at[i];
            }
            else
            {
                if(at[i]>ct[i-1])
                {
                    ct[i]=bt[i]+at[i];
                }
            }
        }
    }
}
```

```

        }
        else
        {
            ct[i]=ct[i-1]+bt[i];
        }
    }
}

for (int i=0;i<n;i++)
{
    tat[i]=ct[i]-at[i];
    wt[i]=tat[i]-bt[i];
    atat = atat + tat[i];
    awt = awt + wt[i];
}

System.out.println("pid \t at \t bt \t ct \t tat \t wt ");
for (int i=0;i<n;i++)
{
    System.out.println(pid[i] + "\t" + at[i] + "\t" + bt[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);

}

public String toString() {
    return "fcfs [";
}

}

```

OUTPUT-

```

5
Enter the process id
1
Enter the arrival time
4
Enter the bus time
5
Enter the process id
2
Enter the arrival time

```

```

4
Enter the bus time
10
Enter the process id
3
Enter the arrival time
1
Enter the bus time
2
Enter the process id
4
Enter the arrival time
3
Enter the bus time
1
Enter the process id
5
Enter the arrival time
8
Enter the bus time
4
pid      at      bt      ct      tat      wt
3         1       2       3       2        0
4         3       1       4       1        0
1         4       5       9       5        0
2         4      10      19      15        5
5         8       4      23      15       11
Average TAT and WT are:
ATAT=7.6      AWT3.2

```