**package** FCFS;

**import** java.util.Scanner;

**public** **class** FCFS

{

**public** **static** **void** main(String[]args)

{

Scanner sc = **new** Scanner(System.***in***);

**int** pid[]=**new** **int**[20];

**int** at[]=**new** **int**[20];

**int** bt[]=**new** **int**[20];

**int** ct[]=**new** **int**[20];

**int** tat[]=**new** **int**[20];

**int** wt[]=**new** **int**[20];

**int** temp;

**float** avg1=0,avg2=0;

System.***out***.println("Enter the total number of processes you want to execute: ");

**int** n=sc.nextInt();

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

{

System.***out***.println("Enter the Arrival Time of "+(i+1)+" process");

at[i]=sc.nextInt();

System.***out***.println("Enter the burst time of "+(i+1)+" process");

bt[i]=sc.nextInt();

pid[i]=i+1;

}

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

{

**for**(**int** j=0;j<n-(i+1);j++)

{

**if**(at[i]>at[i+1])

{

temp=at[i];

at[i]=at[i+1];

at[i+1]=temp;

temp=bt[i];

bt[i]=bt[i+1];

bt[i+1]=temp;

temp=ct[i];

ct[i]=ct[i+1];

ct[i+1]=temp;

}

}

}

**for**(**int** 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];

}

**else**

{

ct[i]=ct[i-1]+bt[i];

}

}

tat[i]=ct[i]-at[i];

wt[i]=tat[i]-bt[i];

avg1 +=tat[i];

avg2 +=wt[i];

}

System.***out***.println("\nPid ArrivalT BurstT CompleteT TurnAroundT WaitingT");

**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("The average Turn Around Tim is: "+avg1/n);

System.***out***.println("The average Waiting Time is: "+avg2/n);

/\*float avg\_t=0;

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

{

avg\_t+=tat[i];

}

System.out.println("The average Turn Around Tim is: "+avg\_t/n);

\*/

}

}