

```

package algorithms;

import java.util.Scanner;
class Fcfs
{
public static void main(String args[]){
int bst[],process[],wt[],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];
bst = new int[n];
wt = new int[n];
tat = new int[n];
System.out.println("\nEnter CPU time:");
for(i=0;i<n;i++)
{
System.out.print("\nProcess["+(i+1)+"]: ");
bst[i] = s.nextInt();
process[i]=i+1;
}
System.out.println("\t\t\t*****FCFS Scheduling*****");
wt[0]=0;
for(i=1;i<n;i++)
{
wt[i]=0;
for(j=0;j<i;j++)
wt[i]+=bst[j];
total+=wt[i];
}
wait avg=(float)total/n;
total=0;
System.out.println("-----");
System.out.println("\nProcess\t\t| Burst Time \t\t|Waiting Time\t\t|Turn Time");
System.out.println("-----");
for(i=0;i<n;i++)
{
tat[i]=bst[i]+wt[i];
total+=tat[i];
System.out.println("\np"+process[i]+" \t\t|"+bst[i]+" \t\t|"+wt[i]+" \t\t|"+tat[i]);
System.out.println("-----");
}
TAT avg=(float)total/n;
System.out.println("\n\nAverage Waiting Time: "+wait avg);
System.out.println("\n\nAverage Turnaround Time: "+TAT avg);
}
}

```

OUTPUT:

Enter number of process: 4

Enter Burst time:

Process[1]: 20

Process[2]: 10

Process[3]: 5

Process[4]: 12

***** Shortest Job First Scheduling*****

Process		Burst Time		Waiting Time		Turnaround Time	
p3		5		0		5	
p2		10		5		15	
p4		12		15		27	
p1		20		27		47	

Average Waiting Time: 11.75

Average Turnaround Time: 23.5