

## PRACTICAL -6

**AIM: WRITE A PROGRAM TO IMPLEMENT FCFS SCHEDULING ALGORITHM.**

**SOL: #include<iostream>**

**#include<stdio.h>**

**using namespace std;**

**int tim=0;**

**int main()**

**{**

**int n,b[20],i,j,w[20],tw=0,taround[20],tt=0;**

**float avw,avt;**

**cout<<"\nEnter the Number of Processes: ";**

**cin>>n;**

**for(i=1;i<=n;i++)**

**{**

**cout<<"\nEnter the Burst Time of Process "<<i<<": ";**

**cin>>b[i];**

**}**

**for(i=1;i<=n;i++)**

**{**

**w[i]=tim;**

**for(j=1;j<=b[i];j++)**

**{**

**tim++;**

**if(j==b[i])**

```

taround[i]=tim;
}
}
for(i=1;i<=n;i++)
{
tw=tw+w[i];
}
avw=(float)tw/n;
for(i=1;i<=n;i++)
{
tt=tt+taround[i];
}
avt=(float)tt/n;
cout<<"\nWaiting Times and Turn Around Times of the Processes";
printf("\n*****");
for(i=1;i<=n;i++)
{
cout<<"\nProcess: "<<i<<"-->"<<"Waiting Time: "<<w[i]<< ", "<<"Turn Around
Time: "<<taround[i];
}
cout<<"\n\nAverage Waiting Time: "<<avw;
cout<<"\nAverage Turn Around Time: "<<avt<<endl;
return 0;
}

```

**OUTPUT:**

```
piyush@Piyush: /mnt/c/Users/hp/Desktop
piyush@Piyush:/mnt/c/Users/hp$ which g++
/usr/bin/g++
piyush@Piyush:/mnt/c/Users/hp$ cd Desktop
piyush@Piyush:/mnt/c/Users/hp/Desktop$ g++ 6.cpp -o 6
./piyush@Piyush:/mnt/c/Users/hp/Desktop$ ./6

Enter the Number of Processes: 4

Enter the Burst Time of Process 1: 0

Enter the Burst Time of Process 2: 2

Enter the Burst Time of Process 3: 5

Enter the Burst Time of Process 4: 7

Waiting Times and Turn Around Times of the Processes
*****
Process: 1-->Waiting Time: 0, Turn Around Time: 0
Process: 2-->Waiting Time: 0, Turn Around Time: 2
Process: 3-->Waiting Time: 2, Turn Around Time: 7
Process: 4-->Waiting Time: 7, Turn Around Time: 14

Average Waiting Time: 2.25
Average Turn Around Time: 5.75
piyush@Piyush:/mnt/c/Users/hp/Desktop$
```