**First Come First Serve(FCFS):**

#include<iostream>

using namespace std;

int main()

{

int at[20] , bt[20] , ct[20] , tat[20] , wt[20] ,g[20];;

//at arrival time bt=burst time ct =completion time tat= turnaround time wt=waiting time

int p,j=1;

float avgt = 0, avgw = 0;

cout<<"Enter the number of process ";

cin>>p;

cout<<"Enter the arrival time for "<<p<<" processes - \n";

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

{

cin>>at[i];

}

cout<<"Enter the burst time for "<<p<<" processes - \n";

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

{

cin>>bt[i];

}

cout<<"Enter the completion time for "<<p<<" processes - \n";

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

{

cin>>ct[i];

}

cout<<"Turn Around time is - \n";

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

{

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

cout<<tat[i];

cout<<"\n";

}

cout<<"Waiting time is - \n";

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

{

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

cout<<wt[i];

cout<<"\n";

}

cout<<"Tabular format for FCFS is - \n";

cout<<"| Process Number | | Arrival Time | | Burst time | | Turnaround time | | Waiting time | ";

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

{

cout<<"\n P"<<j++<<"\t\t\t"<<at[i]<<"\t\t "<<bt[i]<<"\t\t "<<tat[i]<<"\t\t\t "<<wt[i];

cout<<"\n";

}

cout<<"\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_";

cout<<"\n\n";

cout<<"Average of turnaround time is : ";

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

{

avgt = avgt + tat[i];

}

cout<<avgt/p;

cout<<"\n";

cout<<"Average of waiting time is : ";

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

{

avgw = avgw + wt[i];

}

cout<<avgw/p<<"\n";

cout<<"\n\n";

}

OUTPUT:

Enter the number of process 4

Enter the arrival time for 4 processes -

0

1

5

6

Enter the burst time for 4 processes -

2

2

3

4

Enter the completion time for 4 processes -

2

4

8

12

Turn Around time is -

2

3

3

6

Waiting time is -

0

1

0

2

Tabular format for FCFS is -

| Process Number | | Arrival Time | | Burst time | | Turnaround time | | Waiting time |

P1 0 2 2 0

P2 1 2 3 1

P3 5 3 3 0

P4 6 4 6 2

Average of turnaround time is : 3.5

Average of waiting time is : 0.75