UITS

UNIVERSITY OF INFORMATION
TECHNOLOGY AND SCIENCES

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BATCH :- 43

DEPARTMENT :- CSE

COURSE TITLE :-OPERATING SYSTEM

COURSE TEACHER :-CSE-321

COURSE TEACHER :- MALIHA HOSSIAN

Lab Report No :- 01

Experiment Name :- c/c++ Programming to implement FCFS and as well as use that programming language to draw grand.

Theory

First come first serve (FCFS) scheduling algorithm simply schedules the jobs according to their arrival time. The job which comes first in the ready queue will get the CPU first. The lesser the arrival time of the job, the sooner will the job get the CPU. FCFS scheduling may cause the problem of starvation if the burst time of the first process is the longest among all the jobs.

Source Code

```
#include<stdio.h>
int main()
{
   int n,bt[25],wt[30],tat[30],avwt=0,avtat=0,i,j;
   printf("Enter total number of processes(maximum 30):");
   scanf("%d",&n);

   printf("\nEnter Process Burst Time\n");
   for(i=0;i<n;i++)
   {
      printf("P[%d]:",i+1);
      scanf("%d",&bt[i]);
   }
```

```
wt[0]=0;    //waiting time for first process is 0

//calculating waiting time
for(i=1;i<n;i++)
{
   wt[i]=0;
   for(j=0;j<i;j++)
      wt[i]+=bt[j];
}

printf("\nProcess\t\tBurst Time\tWaiting Time\tTurnaround Time");

//calculating turnaround time
for(i=0;i<n;i++)
{
   tat[i]=bt[i]+wt[i];
   avwt+=wt[i];
   avtat+=tat[i];
   printf("\nP[%d]\t\t%d\t\t%d\t\t%d",i+1,bt[i],wt[i],tat[i]);
}
```

```
    avwt/=i;
    avtat/=i;
    printf("\n\nAverage Waiting Time:%d",avwt);
    printf("\nAverage Turnaround Time:%d",avtat);

    return 0;
}
```