

OS LAB

WEEK-01

FIRST COME FIRST SERVE CPU SCHEDULING

Program:

```
#include<stdio.h>

#include<conio.h>

void main()

{

    int n,a[20],b[20],c[20],w[20],tat[20],i,st=0,sum=0,sum1=0;

    float avg,avg1;

    printf("Enter the number of processors:\n");

    scanf("%d",&n);

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

    {

        a[i]=i+1;

        printf("enter %d processor details:\n",i+1);

        printf("enter the burst time:\n");

        scanf("%d",&b[i]);

        printf("enter the arrival time:\n");

        scanf("%d",&c[i]);

    }

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

    {

        printf("Process %d starts at %d and ends at %d\n",i+1,st,st+b[i]);

        tat[i]=st+b[i]-c[i];

        printf("turnaround time is %d\n",tat[i]);

        st=st+b[i];

    }

}
```

```

        w[i]=tat[i]-b[i];

        printf("waiting time is %d\n",w[i]);

        sum+=w[i];

        sum1+=tat[i];

    }

    avg=(float)sum/n;

    avg1=(float)sum1/n;

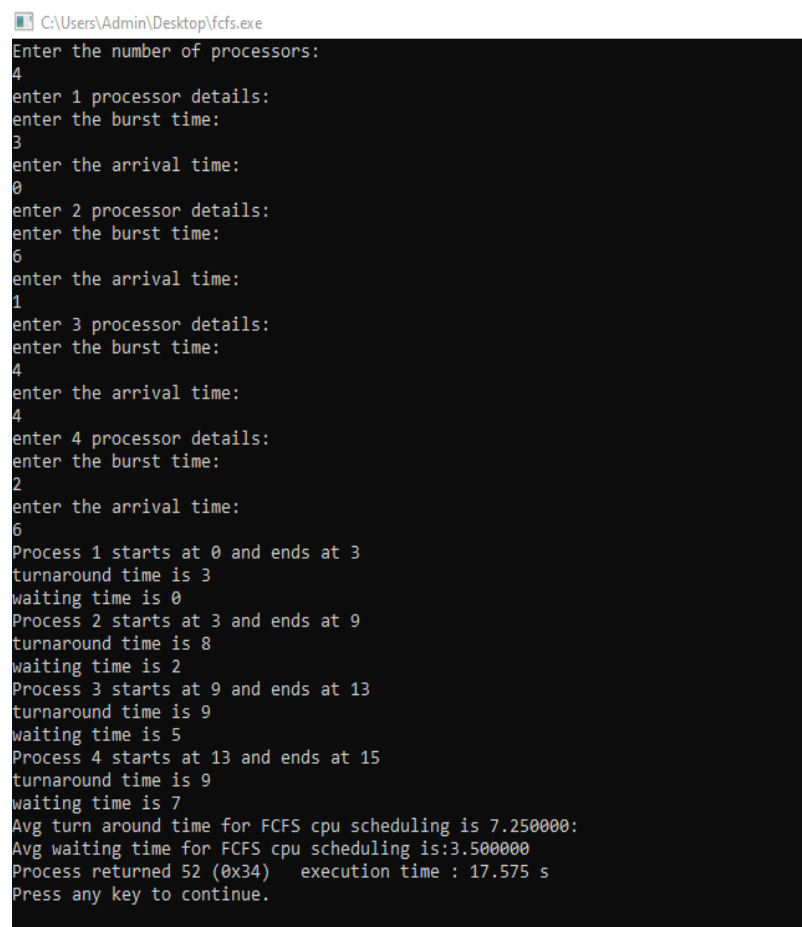
    printf("Avg turn around time for FCFS cpu scheduling is %f:\n",avg1);

    printf("Avg waiting time for FCFS cpu scheduling is:%f",avg);

}

```

Output:



```

C:\Users\Admin\Desktop\fcfs.exe
Enter the number of processors:
4
enter 1 processor details:
enter the burst time:
3
enter the arrival time:
0
enter 2 processor details:
enter the burst time:
6
enter the arrival time:
1
enter 3 processor details:
enter the burst time:
4
enter the arrival time:
4
enter 4 processor details:
enter the burst time:
2
enter the arrival time:
6
Process 1 starts at 0 and ends at 3
turnaround time is 3
waiting time is 0
Process 2 starts at 3 and ends at 9
turnaround time is 8
waiting time is 2
Process 3 starts at 9 and ends at 13
turnaround time is 9
waiting time is 5
Process 4 starts at 13 and ends at 15
turnaround time is 9
waiting time is 7
Avg turn around time for FCFS cpu scheduling is 7.250000:
Avg waiting time for FCFS cpu scheduling is:3.500000
Process returned 52 (0x34)   execution time : 17.575 s
Press any key to continue.

```