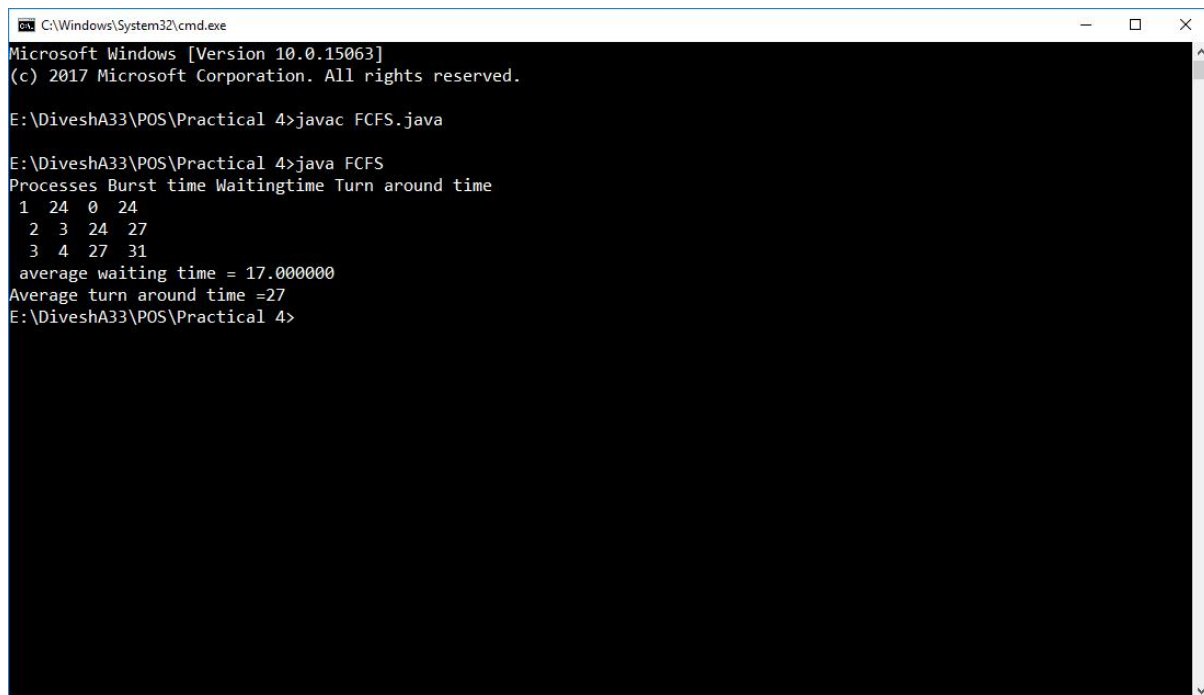**Practical No.: 04**

Aim: Write a program that implements FCFS scheduling algorithm.

Source Code:

```java
import java.text.ParseException;
class FCFS
{
        static void findWaitingTime(int processes[], int n, int bt[], int wt[])
        {
                wt[0] = 0;
                for (int i = 1; i < n; i++){
                wt[i] = bt[i - 1]+ wt[i -1];
                }
        }
        static void findTurnAroundTime(int processes[], int n, int bt[], int wt[], int tat[])
        {
                for (int i = 0; i < n; i++)
                {
                        tat[i] = bt[i] + wt[i];
                }
        }
        static void findavgTime(int processes[], int n, int bt[])
        {
                int wt[] = new int[n], tat[] = new int[n];
                int total_wt = 0, total_tat = 0;
                findWaitingTime(processes, n, bt, wt);
                findTurnAroundTime(processes, n, bt, wt, tat);
                System.out.printf("Processes Burst time Waiting" + " time Turn around time\n");
                for (int i = 0; i < n; i++)
                {
                        total_wt = total_wt +wt[i];
                        total_tat = total_tat + tat[i];
                        System.out.printf(" %d ",(i + 1));
                        System.out.printf(" %d ", bt[i]);
                        System.out.printf(" %d ", wt[i]);
                        System.out.printf(" %d\n ", tat[i]);
                }
                float s = (float)total_wt/(float) n;
                int t = total_tat /n;
                System.out.printf("Average waiting time = %f",s);
                System.out.printf("\n");
                System.out.printf("Average turn around time = %d",t);
        }
        public static void main(String[] args) throws ParseException
        {
                int processes[] = {1, 2, 3};
                int n = processes.length;
                int burst_time[] = {24, 3 , 4};
```

```
            findavgTime(processes, n, burst_time);
    }
}
```

Output: