CPU SCHEDULING ALGORITHM

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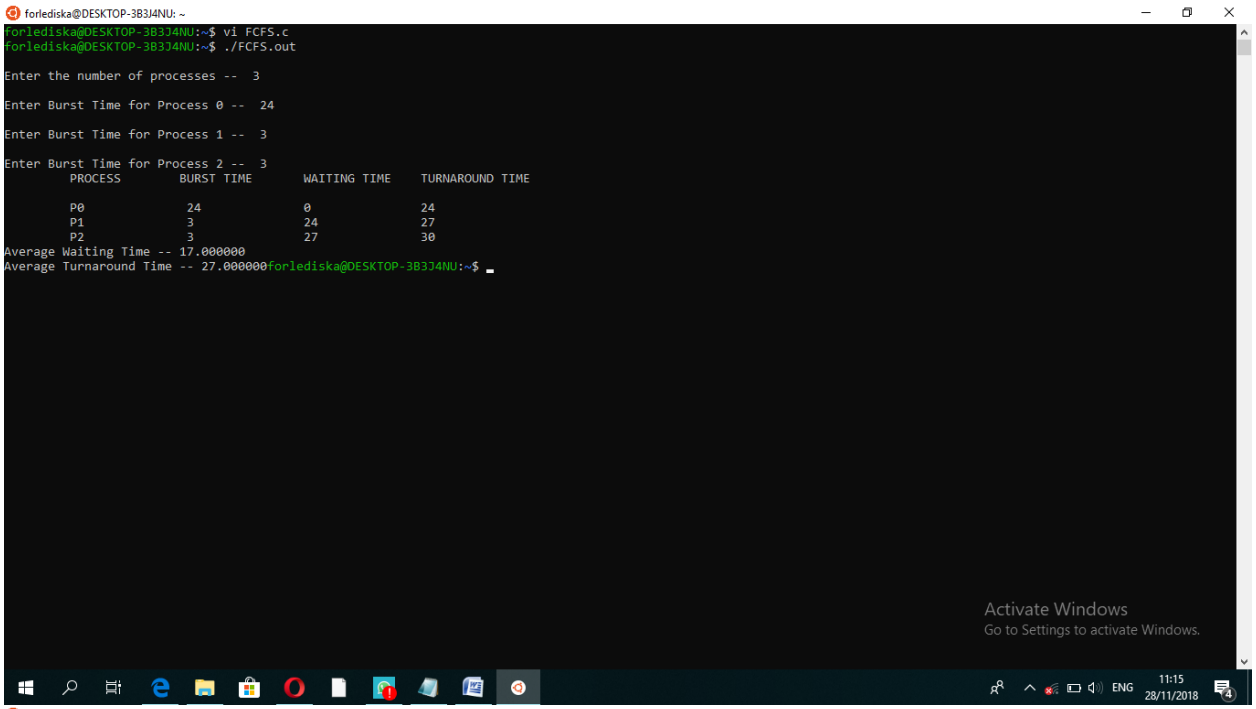
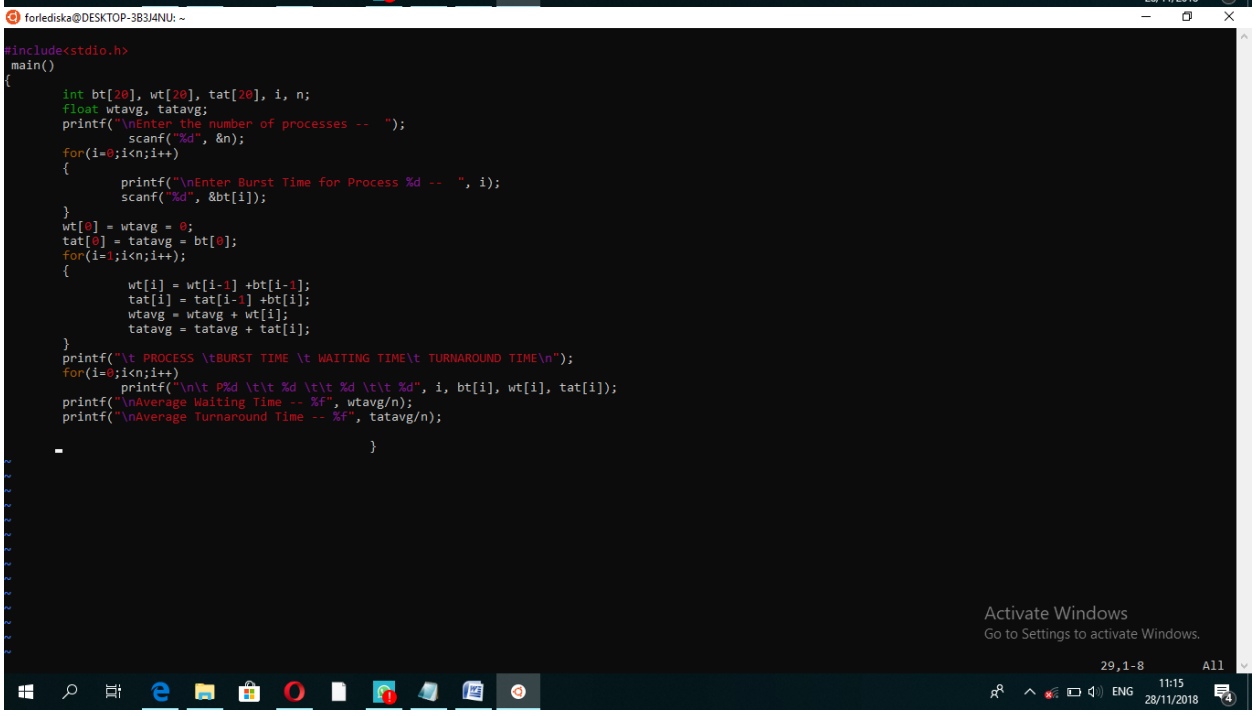
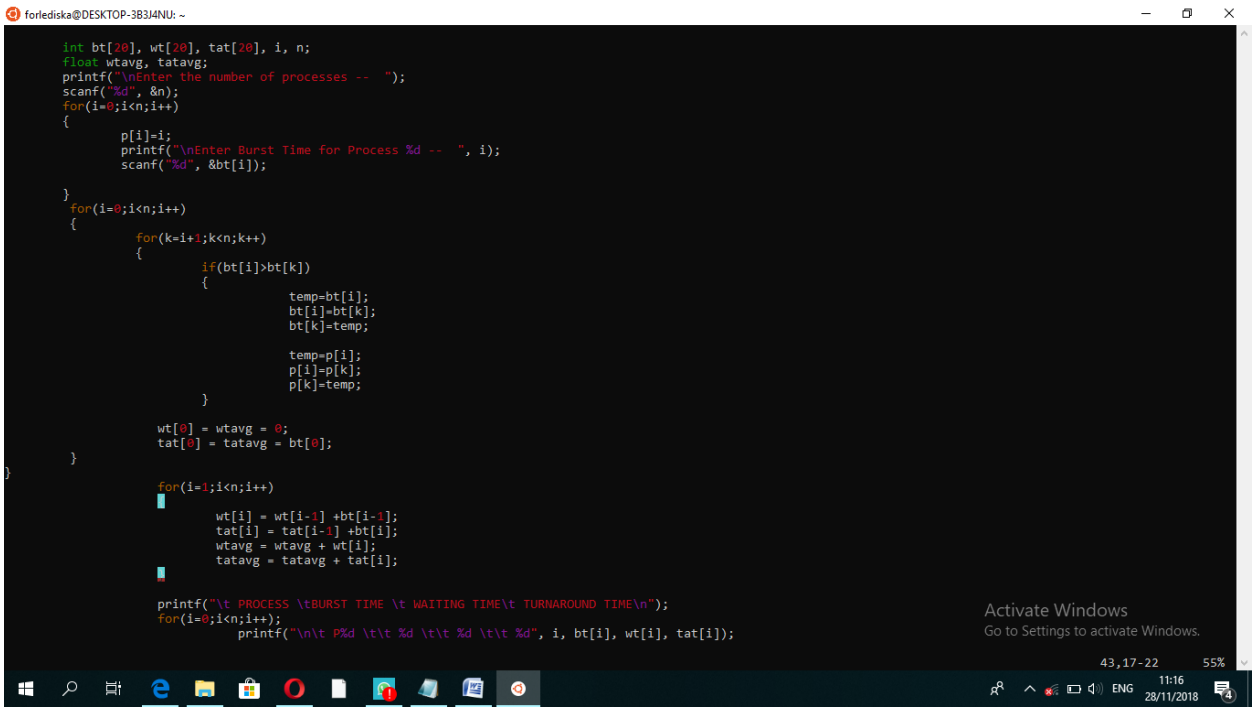
FCFS CPU SCHEDULING ALGORITHM





SJF CPU SCHEDULING ALGORITHM

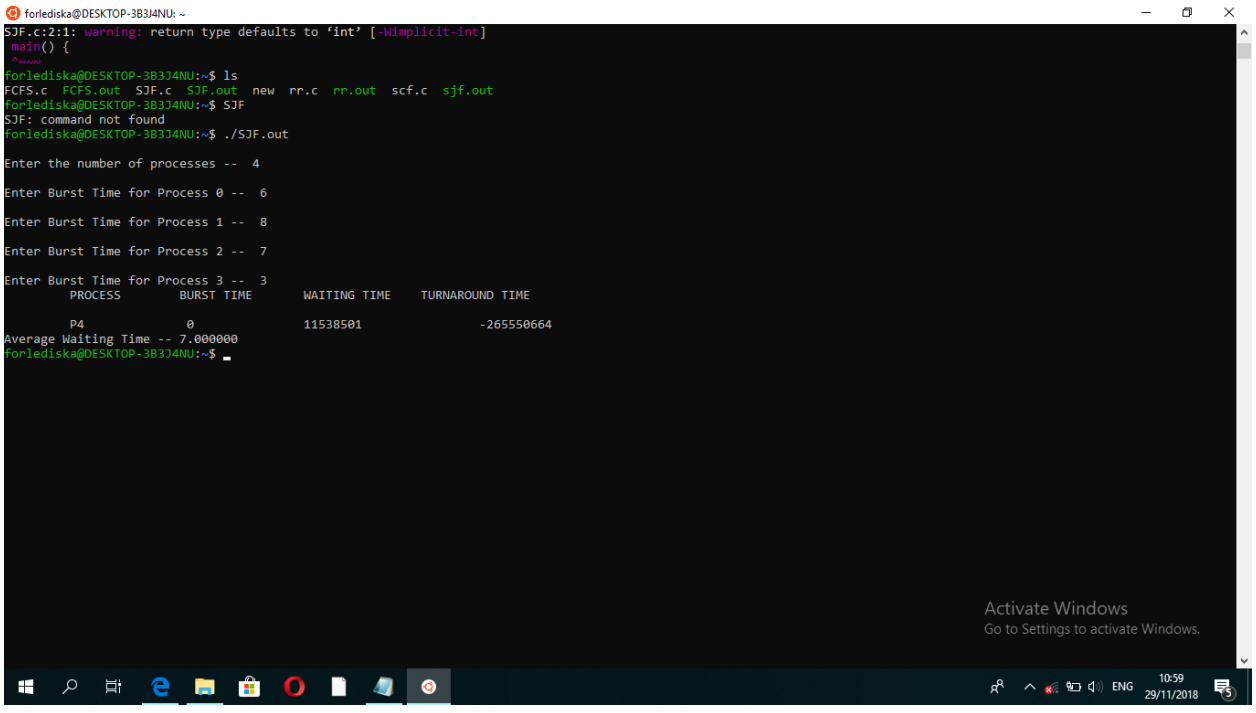


```
forlediska@DESKTOP-3B3J4NU: ~
```

```
        int bt[20], wt[20], tat[20], i, n;
        float wtavg, tatavg;
        printf("\nEnter the number of processes --  ");
        scanf("%d", &n);
        for(i=0;i<n;i++)
        {
                p[i]=i;
                printf("\nEnter Burst Time for Process %d --  ", i);
                scanf("%d", &bt[i]);

        }
         for(i=0;i<n;i++)
         {
                 for(k=i+1;k<n;k++)
                 {
                         if(bt[i]>bt[k])
                         {
                                    temp=bt[i];
                                    bt[i]=bt[k];
                                    bt[k]=temp;

                                    temp=p[i];
                                    p[i]=p[k];
                                    p[k]=temp;
                         }

                   wt[0] = wtavg = 0;
                   tat[0] = tatavg = bt[0];
         }
}
                   for(i=1;i<n;i++)
                   {
                           wt[i] = wt[i-1] +bt[i-1];
                           tat[i] = tat[i-1] +bt[i];
                           wtavg = wtavg + wt[i];
                           tatavg = tatavg + tat[i];
                   }

                   printf("\t PROCESS \tBURST TIME \t WAITING TIME\t TURNAROUND TIME\n");
                   for(i=0;i<n;i++);
                            printf("\n\t P%d \t\t %d \t\t %d \t\t %d", i, bt[i], wt[i], tat[i]);
```

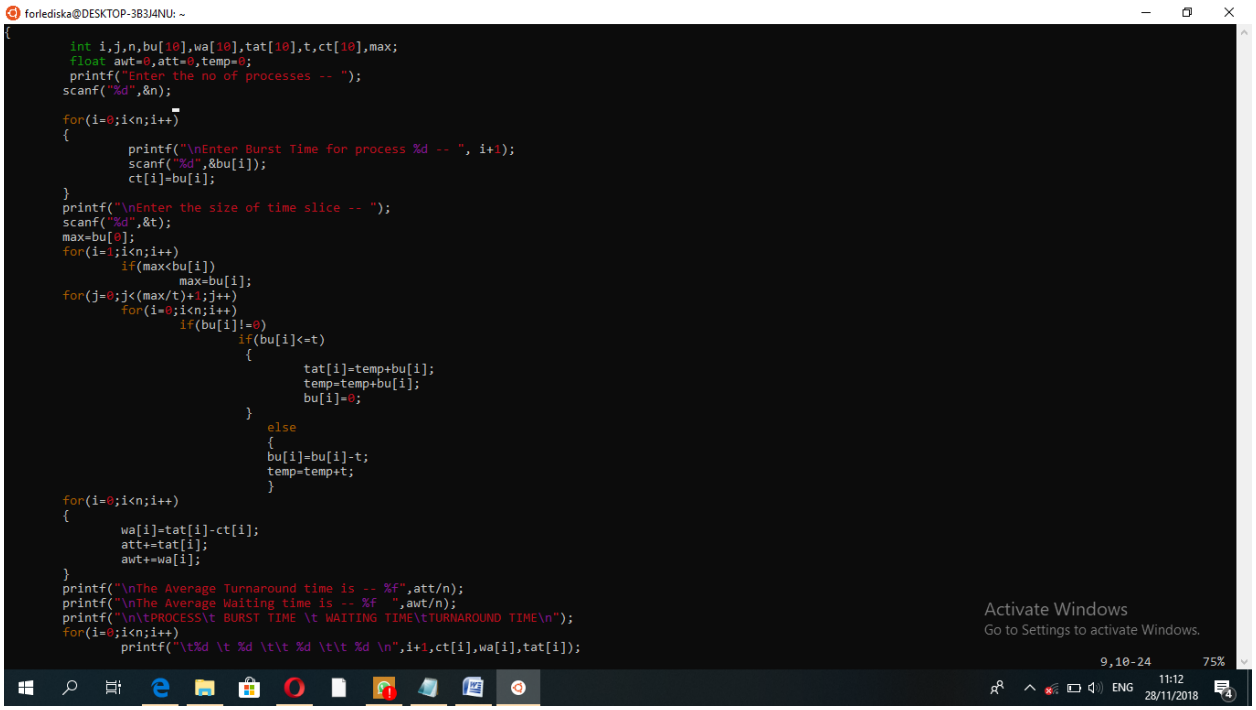


```
43,17-22      55%
```



```
forlediska@DESKTOP-3B3J4NU: ~
SJF.c:2:1: warning: return type defaults to ‘int’ [-Wimplicit-int]
 main() {
 ^~~~
forlediska@DESKTOP-3B3J4NU:~$ ls
FCFS.c  FCFS.out  SJF.c  SJF.out  new  rr.c  rr.out  scf.c  sjf.out
forlediska@DESKTOP-3B3J4NU:~$ SJF
SJF: command not found
forlediska@DESKTOP-3B3J4NU:~$ ./SJF.out

Enter the number of processes --  4

Enter Burst Time for Process 0 --  6

Enter Burst Time for Process 1 --  8

Enter Burst Time for Process 2 --  7

Enter Burst Time for Process 3 --  3
        PROCESS         BURST TIME      WAITING TIME    TURNAROUND TIME

        P4              0               11538501                -265550664
Average Waiting Time -- 7.000000
forlediska@DESKTOP-3B3J4NU:~$
```

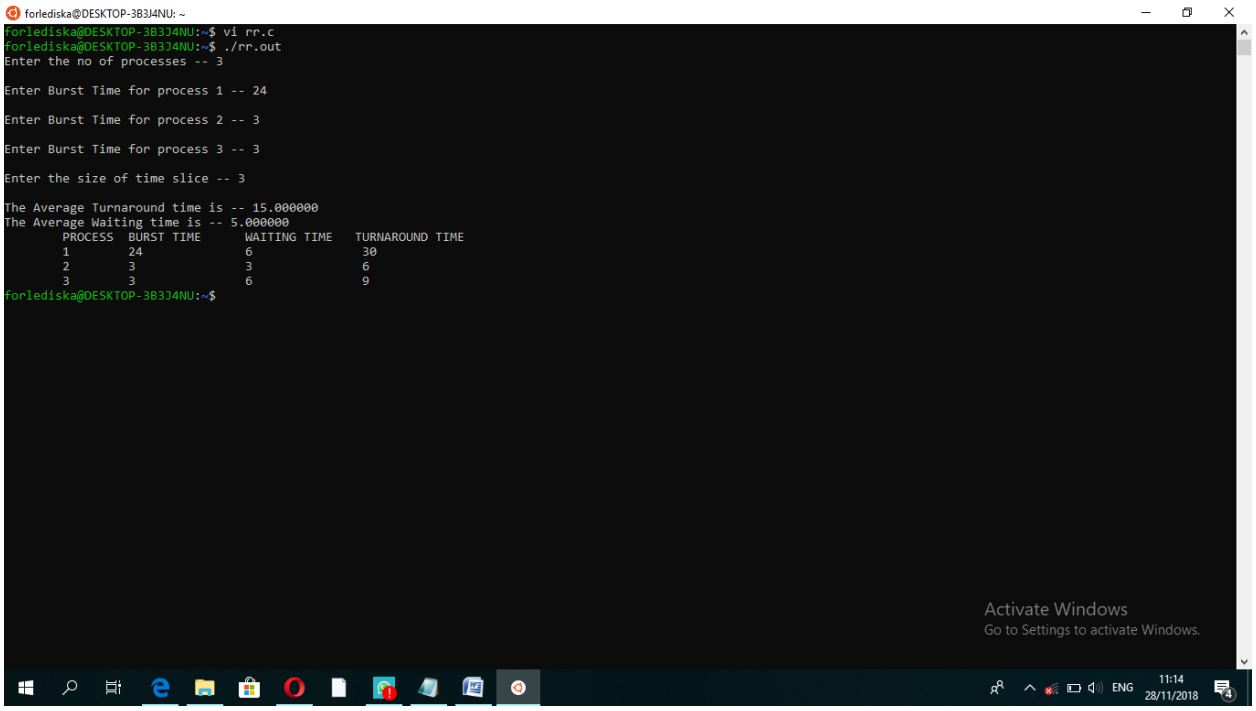
ROUND ROBIN CPU SCHEDULING ALGORITHM



```
{
        int i,j,n,bu[10],wa[10],tat[10],t,ct[10],max;
        float awt=0,att=0,temp=0;
        printf("Enter the no of processes -- ");
       scanf("%d",&n);

       for(i=0;i<n;i++)
       {
               printf("\nEnter Burst Time for process %d -- ", i+1);
               scanf("%d",&bu[i]);
               ct[i]=bu[i];
       }
       printf("\nEnter the size of time slice -- ");
       scanf("%d",&t);
       max=bu[0];
       for(i=1;i<n;i++)
              if(max<bu[i])
                     max=bu[i];
       for(j=0;j<(max/t)+1;j++)
              for(i=0;i<n;i++)
                     if(bu[i]!=0)
                            if(bu[i]<=t)
                            {
                                   tat[i]=temp+bu[i];
                                   temp=temp+bu[i];
                                   bu[i]=0;
                            }
                               else
                               {
                               bu[i]=bu[i]-t;
                               temp=temp+t;
                               }
       for(i=0;i<n;i++)
       {
              wa[i]=tat[i]-ct[i];
              att+=tat[i];
              awt+=wa[i];
       }
       printf("\nThe Average Turnaround time is -- %f",att/n);
       printf("\nThe Average Waiting time is -- %f  ",awt/n);
       printf("\n\tPROCESS\t BURST TIME \t WAITING TIME\tTURNAROUND TIME\n");
       for(i=0;i<n;i++)
              printf("\t%d \t %d \t\t %d \t\t %d \n",i+1,ct[i],wa[i],tat[i]);
```

Activate Windows
Go to Settings to activate Windows.

9,10-24 75%



```
forlediska@DESKTOP-3B3J4NU:~$ vi rr.c
forlediska@DESKTOP-3B3J4NU:~$ ./rr.out
Enter the no of processes -- 3

Enter Burst Time for process 1 -- 24

Enter Burst Time for process 2 -- 3

Enter Burst Time for process 3 -- 3

Enter the size of time slice -- 3

The Average Turnaround time is -- 15.000000
The Average Waiting time is -- 5.000000
        PROCESS  BURST TIME      WAITING TIME    TURNAROUND TIME
        1        24              6               30
        2        3               3               6
        3        3               6               9
forlediska@DESKTOP-3B3J4NU:~$
```

Activate Windows
Go to Settings to activate Windows.