Nama : Haikal Fikri Rejani
NIM : 17.01.53.2035
Kelas : R2 (Karyawan) / Teknik Informatika

Program Penjadwalan Proses dan Hasil Eksekusi

1. **First come**

2. Shortest-Job-First (SJF)

```
haikal@DESKTOP-6URA0ND: ~
haikal@DESKTOP-6URA0ND:~$ ./haikalfc.out

Enter the number of processes -- 3

Enter Burst Time for Process 0 -- 2

Enter Burst Time for Process 1 -- 1

Enter Burst Time for Process 2 -- 2
        PROCESS         BURST TIME      WAITING TIME    TURNAROUND TIME

        P0              2               0               2
        P1              1               2               3
        P2              2               3               5
Average Waiting Time -- 1.666667
Average Turnaround Time -- 3.333333haikal@DESKTOP-6URA0ND:~$ vi haikalfc.c
haikal@DESKTOP-6URA0ND:~$ touch haikalsj.c
haikal@DESKTOP-6URA0ND:~$ vi haikalsj.c
haikal@DESKTOP-6URA0ND:~$ gcc haikalsj.c -o haikalsj.out
haikal@DESKTOP-6URA0ND:~$ ./haikalsj.out

Enter the number of processes -- 1
Enter Burst Time for Process 0 -- 2

        PROCESS         BURST TIME      WAITING TIME    TURNAROUND TIME

        P0              2               0               2
Average Waiting Time -- 0.000000
Average Turnaround Time -- 2.000000
haikal@DESKTOP-6URA0ND:~$
```



```
            }
        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("\n\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", p[i], bt[i], wt[i], tat[i]);
        printf("\nAverage Waiting Time -- %f", wtavg/n);
        printf("\nAverage Turnaround Time -- %f", tatavg/n);
        printf("\n");
"haikalsj.c" 40L, 910C                                                    40,1          Bot
```

3. Round-Robin (RR)

```
haikal@DESKTOP-6URA0ND:~$ vi haikalsj.c
haikal@DESKTOP-6URA0ND:~$ touch haikalr.c
haikal@DESKTOP-6URA0ND:~$ vi haikalr.c
haikal@DESKTOP-6URA0ND:~$ gcc haikalr.c -o haikalr.out
haikal@DESKTOP-6URA0ND:~$ ./haikalr.out
Enter the no of processes -- 1

Enter Burst Time for process 1 -- 2

Enter the size of time slice -- 3

The Average Turnaround time is -- 2.000000
The Average Waiting time is -- 0.000000
        PROCESS  BURST TIME      WAITING TIME    TURNAROUND TIME
        1        2               0                       2
haikal@DESKTOP-6URA0ND:~$ ./haikalr.out
Enter the no of processes -- 2

Enter Burst Time for process 1 -- 3

Enter Burst Time for process 2 -- 4

Enter the size of time slice -- 54

The Average Turnaround time is -- 5.000000
The Average Waiting time is -- 1.500000
        PROCESS  BURST TIME      WAITING TIME    TURNAROUND TIME
        1        3               0                       3
        2        4               3                       7
haikal@DESKTOP-6URA0ND:~$
```

```c
                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]);
}
"haikalr.c" 48L, 1018C                                          48,0-1        Bot
```