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NIM;17.01.53.2004

TUGAS PEMROGRAMAN

1.FCFS

2.SJF.

```
rifan@AFIF-KOMP: $ ./sjfafif.out

Enter the number of processes -- 5
Enter Burst Time for Process 0 -- 40
Enter Burst Time for Process 1 -- 35
Enter Burst Time for Process 2 -- 10
Enter Burst Time for Process 3 -- 50
Enter Burst Time for Process 4 -- 100


        PROCESS         BURST TIME      WAITING TIME    TURNAROUND TIME

        P2              10              0               10
        P1              35              10              45
        P0              40              45              85
        P3              50              85              135
        P4              100             135             235
Average Waiting Time -- 55.000000
Average Turnaround Time -- 102.000000
rifan@AFIF-KOMP: $
```

```c
#include<stdio.h>
main()
{
        int p[20], bt[20], wt[20], tat[20], i, k, n, temp;
        float wtavg, tatavg;
        printf("\nEnter the number of processes -- ");
        scanf("%d", &n);
        for(i=0;i<n;i++)
        {
                p[i]=i;
                printf("Enter 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("\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]);
        }
-- INSERT --                                                            2,1            Top
```

33.RR

```
rifan@AFIF-KOMP:~$ ./rrafif.out
-bash: ./rrafif.out: No such file or directory
rifan@AFIF-KOMP:~$ gcc rrafif.c -o rrafif.out
rrafif.c:2:1: warning: return type defaults to 'int' [-Wimplicit-int]
 main()
 ^~~~
rifan@AFIF-KOMP:~$ ./rrafif.out
Enter the no of processes -- 5

Enter Burst Time for process 1 -- 20

Enter Burst Time for process 2 -- 10

Enter Burst Time for process 3 -- 30

Enter Burst Time for process 4 -- 60

Enter Burst Time for process 5 -- 40

Enter the size of time slice -- 5

The Average Turnaround time is -- 104.000000
The Average Waiting time is -- 72.000000
        PROCESS  BURST TIME      WAITING TIME    TURNAROUND TIME
        1        20              55              75
        2        10              25              35
        3        30              80              110
        4        60              100             160
        5        40              100             140
rifan@AFIF-KOMP:~$
```

```c
#include<stdio.h>
main()
{
        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]);
}
```

"rrafif.c" 40L, 974C   4,1-8   All