**C Program to implement SJF CPU Scheduling Algorithm:**

**CODE**

**//C program to implement SJF CPU Scheduling algorithm**

**#include<stdio.h>**

**int main()**

**{**

**int bt[20],p[20],wt[20],tat[20],i,j,n,total=0,pos,temp;**

**float avg\_wt,avg\_tat;**

**printf("Enter number of process:");**

**scanf("%d",&n);**

**printf("nEnter Burst Time:n");**

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

**{**

**printf("p%d:",i+1);**

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

**p[i]=i+1;**

**}**

**//sorting of burst times**

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

**{**

**pos=i;**

**for(j=i+1;j<n;j++)**

**{**

**if(bt[j]<bt[pos])**

**pos=j;**

**}**

**temp=bt[i];**

**bt[i]=bt[pos];**

**bt[pos]=temp;**

**temp=p[i];**

**p[i]=p[pos];**

**p[pos]=temp;**

**}**

**wt[0]=0;**

**for(i=1;i<n;i++)**

**{**

**wt[i]=0;**

**for(j=0;j<i;j++)**

**wt[i]+=bt[j];**

**total+=wt[i];**

**}**

**avg\_wt=(float)total/n;**

**total=0;**

**printf("nProcesst    Burst Time    tWaiting TimetTurnaround Time");**

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

**{**

**tat[i]=bt[i]+wt[i];**

**total+=tat[i];**

**printf("np%dtt  %dtt    %dttt%d",p[i],bt[i],wt[i],tat[i]);**

**}**

**avg\_tat=(float)total/n;**

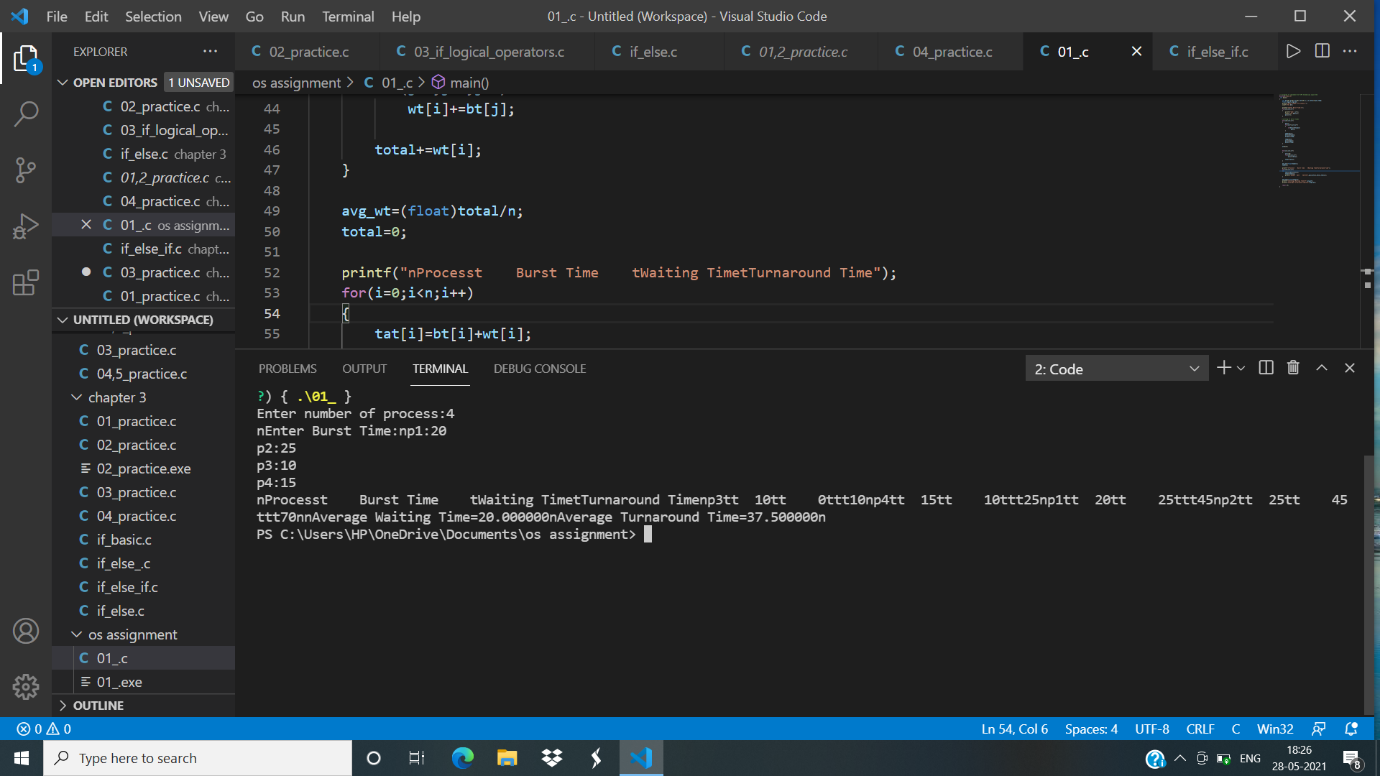
**printf("nnAverage Waiting Time=%f",avg\_wt);**

**printf("nAverage Turnaround Time=%fn",avg\_tat);**

**return 0;**

**}**

**OUTPUT**

****