**ASSIGNMENT-5**

**Q1. Write a program to implement SJFscheduling algorithms for the following two cases:**

1. **When Arrival time is same.**

**P# AT BT**

**P1 0 3**

**P2 0 6**

**P3 0 2**

**P4 0 4**

**P5 0 5**

**Implement the SJFscheduling manually and verify your output.**

#include<stdio.h>

int main(){

int Bt[20],At,Tat[20],Wt[20],temp,p[20]={0},ct[20]={0};

int Ntat[20];

int n,i,j,pos,sum=0;

printf("\nEnter the number of processes:");

scanf("%d",&n);

printf("\nSame Arrival time for each Process:");

scanf("%d",&At);

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

printf("\nBurst time of Process[P%d]:",i+1);

scanf("\n%d",&Bt[i]);

p[i]=i+1;

}

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;

}

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

sum+=Bt[i];

ct[i]+=sum;

}

Wt[0]=0;

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

{

Tat[i]=ct[i]-At;

Wt[i]=Tat[i]-Bt[i];

Ntat[i]=(Tat[i]/Bt[i]);

}

printf("\n------------------------------------------\n");

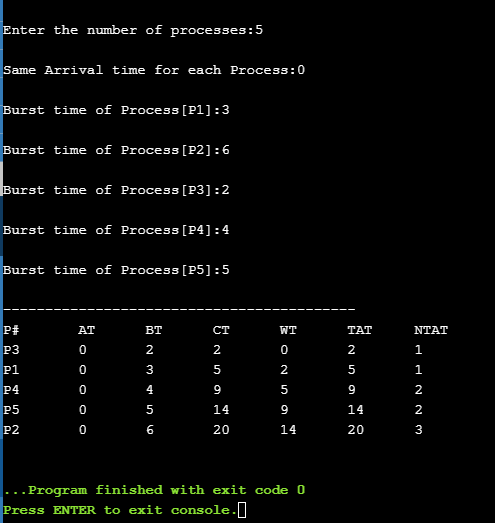
printf("P#\t AT\t BT\t CT\t WT\t TAT\t NTAT\t\n");

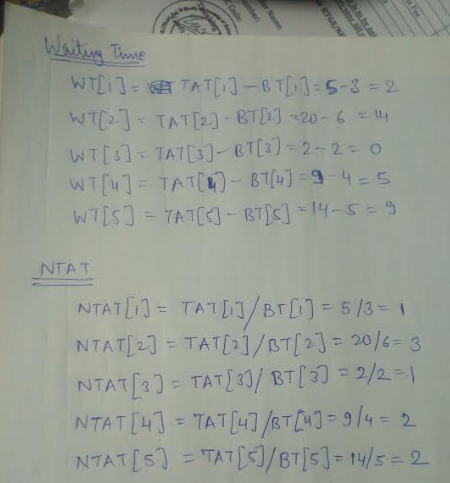
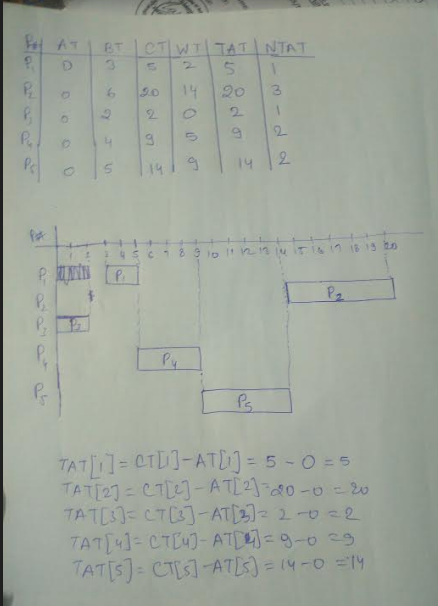
for(i=0;i<n;i++){

printf("P%d\t %d\t %d\t %d\t %d\t %d\t %d\t\n",p[i],At,Bt[i],ct[i],Wt[i],Tat[i],Ntat[i]);

} }

**OUTPUT-**

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