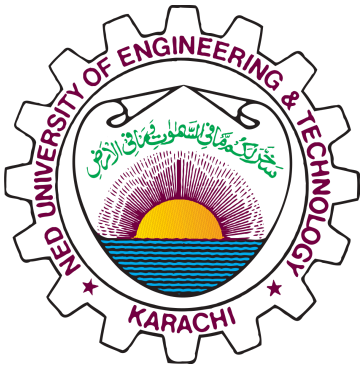

BS(DT) THIRD YEAR
CT-353 OPERATING SYSTEM
LAB 01

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1)Implement the First Come First Serve code and paste the output be low.

```c
#include<stdio.h>
#include<conio.h>
#define max 30

void main(){
    int i,j,n,bt[max],wt[max],tat[max];
    float awt=0,atat=0;
    system("cls");
    printf("\nEnter the number of processes: ");

        scanf("%d", &n);

        printf("Enter Burst Time for Process:");
        for(i=0;i<n;i++){
        scanf("%d", &bt[i]);
        }
        printf("process\t burst time\t waiting time\t turn around time\n");
        for(i=0;i<n;i++){
            wt[i]=0;
            tat[i]=0;
            for(j=0;j<i;j++){
                wt[i]=wt[i]+bt[j];
            }
            tat[i]=wt[i]+bt[i];

            awt=awt+wt[i];
            atat=atat+tat[i];
            printf("%d\t%d\t\t%d\t\t%d\n",i+1,bt[i],wt[i],tat[i]);
        }
        awt=awt/n;
        atat=atat/n;
        printf("Avarage waiting time = %f\n",awt);
        printf("Avarage turn around time = %f\n",atat);

        getch();


}
```

```
E:\LAB\lab1Q1.exe

Enter the number of processes: 4
Enter Burst Time for Process:3 2 3 1
process  burst time      waiting time    turn around time
1       3               0               3
2       2               3               5
3       3               5               8
4       1               8               9
Avarage waiting time = 4.000000
Avarage turn around time = 6.250000
```

2)Implement the Shortest Job First code and paste the output below.

```c
#include<stdio.h>
#include<conio.h>
#define max 30
void main(){
    int j,i,n,t,p[max],bt[max],wt[max],tat[max];
    float awt=0,atat=0;
    //clrscr();
    printf("Enter the number of process:");
    scanf("%d",&n);
    printf("Enter the process number:");
    for (i=0;i<n;i++)
    {
        scanf("%d",&p[i]);
    }

    printf("Enter the burst time of the processes: ");
    for(int i=0;i<n;i++)
    {
        scanf("%d",&bt[i]);
    }
    for(i=0;i<n;i++)
    {
        for(j=0;j<n-i-1;j++)
        {

            if(bt[j]>bt[j+1])
            {
                t=bt[j];
                bt[j]=bt[j+1];
                bt[j+1]=t;

                t=p[j];
                p[j]=p[j+1];
                p[j+1]=t;
            }
        }
    }
```

```c
printf("process\t burst time\t waiting time\t turn around time\n");
for(i=0;i<n;i++)
{
    wt[i]=0;
    tat[i]=0;
    for(j=0;j<i;j++){
        wt[i]=wt[i]+bt[j];

    }
    tat[i]=wt[i]+bt[i];
    awt=awt+wt[i];
    atat=atat+tat[i];
    printf("%d\t %d\t\t %d\t\t %d\n",p[i],bt[i],wt[i],tat[i]);
}
awt=awt/n;
atat=atat/n;
printf("Avarage waiting time = %f\n",awt);
printf("Avarage turn around time = %f\n",atat);
getch();
```

```
E:\LAB\lab2q2.exe
Enter the number of process:4
Enter the process number:1 2 3 4
Enter the burst time of the processes: 3 2 4 1
process  burst time      waiting time    turn around time
4        1               0               1
2        2               1               3
1        3               3               6
3        4               6               10
Avarage waiting time = 2.500000
Avarage turn around time = 5.000000
```