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#include<stdio.h>
int main()
{
    int p[10],at[10],bt[10],ct[10],tat[10],wt[10],i,j,temp=0,n;
    float awt=0,atat=0;
    printf("enter no of proccess you want:");
    scanf("%d",&n);
    printf("enter %d process:",n);
    for(i=0;i<n;i++)
    {
        scanf("%d",&p[i]);
    }
    printf("enter %d arrival time:",n);
    for(i=0;i<n;i++)
    {
        scanf("%d",&at[i]);
    }
    printf("enter %d burst time:",n);
    for(i=0;i<n;i++)
    {
        scanf("%d",&bt[i]);
    }
    // sorting at,bt, and process according to at
    for(i=0;i<n;i++)
    {
        for(j=0;j<(n-i);j++)
        {
            if(at[j]>at[j+1])
            {
                temp=p[j+1];
                p[j+1]=p[j];
                p[j]=temp;
                temp=at[j+1];
                at[j+1]=at[j];
                at[j]=temp;
                temp=bt[j+1];
                bt[j+1]=bt[j];
                bt[j]=temp;
            }
        }
    }
    /* calculating 1st ct */
    ct[0]=at[0]+bt[0];
    /* calculating 2 to n ct */
    for(i=1;i<n;i++)
    {
        //when proess is ideal in between i and i+1
        temp=0;
        if(ct[i-1]<at[i])
        {
            temp=at[i]-ct[i-1];
        }
    }
}

```

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    ct[i]=ct[i-1]+bt[i]+temp;
}
/* calculating tat and wt */
printf("\np\t A.T\t B.T\t C.T\t TAT\t WT");
for(i=0;i<n;i++)
{
    tat[i]=ct[i]-at[i];
    wt[i]=tat[i]-bt[i];
    atat+=tat[i];
    awt+=wt[i];
}
atat=atat/n;
awt=awt/n;
for(i=0;i<n;i++)
{
    printf("\nP%d\t %d\t %d\t %d \t %d \t %d",p[i],at[i],bt[i],ct[i],tat[i],wt[i]);
}
printf("\naverage turnaround time is %f",atat);

printf("\naverage waiting time is %f",awt);
return 0;
}

```