#include<stdio.h>

typedef struct schedule

{

int pid;

int arr;

int burst,wait,tat;

}schedule;

schedule s[20];

int n;

void main()

{

int i,wt=0,bt=0;

float x=0,avgtat,y=0,avgwait;

printf("enter no of processes:");

scanf("%d",&n);

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

{

s[i].pid=i;

s[i].arr=0;

printf("Enter the burst time for process P[%d]:",i);

scanf("%d",&s[i].burst);

}

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

{

if(i!=0)

{

wt=wt+s[i-1].burst;

s[i].wait=wt;

}

else

s[i].wait=0;

}

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

{

bt=s[i].burst+bt;

s[i].tat=bt;

}

printf("\t------------");

printf("GANTT chart");

printf("------------");

printf("\n 0");

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

{

printf("\tP%d",s[i].pid);

printf("\t%d",s[i].tat);

}

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

printf("Table");

printf("------------");

printf("\n ID ARR TIME BURST TIME WAIT TIME TURN AROUND TIME\n");

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

{

printf("\n %d",s[i].pid);

printf("\t%d",s[i].arr);

printf("\t%d",s[i].burst);

printf("\t%d",s[i].wait);

printf("\t\t%d",s[i].tat);

x=x+s[i].tat;

y=y+s[i].wait;

}

avgtat=x/n;

avgwait=y/n;

printf("\n average TAT=%f",avgtat);

printf("average wt time=%f\n",avgwait);

}