Input and output

level1

```c
#include <stdio.h>
#include <math.h>
int main(){
float b,ls,rs1,rs2;
scanf("%f %f",&b,&ls);
b=b*b;
ls=ls*ls;
rs1=sqrt(ls-b);
rs2=sqrt(ls+b);
printf("%.5f %.5f",rs1,rs2);
        return 0;}
```
Lasya bought volleyball
```c
#include <stdio.h>
int main()
{
float radiusofball,volumeofball;
scanf("%f",&radiusofball);
volumeofball=4/3*3.14*radiusofball*radiusofball*radiusofball;
printf("\n%f",volumeofball);
        return 0;
}
```
Sajid train ticket
```c
#include <stdio.h>
int main()
{
int num1,num2,num3;
int sum;
scanf("%d %d %d",&num1,&num2,&num3);
sum=num1+num2+num3;
printf("\n%d",sum);
        return 0;
}
```
Brinta is playing chess
```c
#include <stdio.h>
int main()
{
```

```c
int n,m;
int d;
scanf("%d %d",&n,&m);d=n-1+(1+2*(n-1))*(m-1);
printf("%d",d);
        return 0;
}
```
Elavenil bakery
```c
#include <stdio.h>
int main(){
int n;
scanf("%d",&n);
int f;
f=n/2+1;
printf("%d",f);
        return 0;}
```
One beautiful sunday
```c
#include <stdio.h>
int main()
{
float num1,num2;
double resnum1,resnum2;
scanf("%f",&num1);
scanf("%f",&num2);
scanf("%lf",&resnum1);
scanf("%lf",&resnum2);
printf("\n%lf",num1);
printf("\n%lf",num2);
        return 0;
}
```
Tina brother friendly task
```c
#include <stdio.h>
int main()
{int n;
int tot_square;
scanf("%d",&n);tot_square=(n*(n+1)/2)*(2*n+1)/3;
printf("%d",tot_square);
        return 0;
}
```
Electricity officer
```c
#include <stdio.h>
#include <math.h>
int main()
{
int unitconsumed,totalbillamount;
```

```c
int  costperunit;
scanf("%d",&unitconsumed);
scanf("%d",&costperunit);
totalbillamount=pow(unitconsumed,costperunit);
printf("\n%d",totalbillamount);
        return 0;
}
```

Rathik organised technic round
```c
#include <stdio.h>
int main()
{
int testnum1,testnum2;
int sum,sub,mult,mod;
float div;
scanf("%d",&testnum1);
scanf("%d",&testnum2);
sum=testnum1+testnum2;
sub=testnum1-testnum2;
div=(float)testnum1/(float)testnum2;
mult=testnum1*testnum2;
mod=testnum1%testnum2;
printf("\nAddition : %d",sum);
printf("\nSubtraction : %d",sub);
printf("\nMultiplication : %d",mult);
printf("\nDivision : %0.3f",div);
printf("\nModulus : %d",mod);
        return 0;
}
```

Ramesh working eng clg
```c
#include <stdio.h>
int main()
{
int alvqntoffood,messcnt,dividedqnt,remfood;
scanf("%d\t",&alvqntoffood);
scanf("%d",&messcnt);
dividedqnt=alvqntoffood/messcnt;
remfood=alvqntoffood%messcnt;
printf("%d %d\t",dividedqnt,remfood);
        return 0;
}
```

Binita was travelling from chennai to delhi
```c
#include <stdio.h>
int main()
{
```

```c
int tot_mins,hrs,mins;
scanf("%d",&tot_mins);
hrs=tot_mins/60;
mins=tot_mins%60;
printf("%d Hours and %d Minutes",hrs,mins);
        return 0;
}
```

Elavenil Chessboard

```c
#include <stdio.h>
int main()
{int n,m;
int c;
scanf("%d %d",&n,&m);
c=(m-1)*(n-1);
printf("%d",c);}
```

Nancy Bought Apple

```c
#include <stdio.h>
int main()
{
    int billamt,amtgiven;
    int q,r;
    scanf("%d",&amtgiven);
    scanf("%d",&billamt);
    q=amtgiven/billamt;
    r=amtgiven%billamt;
    printf("Quotient:%d\nRemainder:%d",q,r);

        return 0;
}
```

Tina's Trainer

```c
#include <stdio.h>
int main()
{  int U,V;
int sum;
scanf("%2d%2d",&U,&V);
sum=U*V/2+((U%2)*(V%2));
    printf("%d",sum);
        }
```

Arif Came from

```c
#include <stdio.h>
int main()
{
    float val1,val2,outcome;
    scanf("%f%f",&val1,&val2);
    outcome=val1*val2;
    printf("%.4f",outcome);

        return 0;
}
```

Phoenix Mall

```c
#include <stdio.h>
int main()
{
    int n,m,a;
    int stones;
    scanf("%d %d %d",&n,&m,&a);
stones=((n+a-1)/a)*((m+a-1)/a);
    printf("%d",stones);
        return 0;
}
```

Selvan was playing

```c
#include <stdio.h>
int main()
{
    int length,width,height,surfacearea;
    scanf("%d %d %d",&length,&width,&height);
    surfacearea=2*(width*length+length*height+height*width);
    printf("%d", surfacearea);

        return 0;
}
```

```c
#include <stdio.h>
int main()
{
    int iplno;
    scanf("%d",&iplno);
    printf("%o",iplno);
    printf("\n%x",iplno);
        return 0;
}
```

Nathan works as HR

```c
#include <stdio.h>
int main()
{
    float var1,var2,res;
    scanf("%f %f",&var1,&var2);
    res=var1+var2;
    printf("%.3f",res);

        return 0;
}
```

Employee of one million dollar

```c
 #include <stdio.h>
int main()
{
    char Asc;
    scanf("%c",&Asc);
    printf("%d",(int)Asc);

        return 0;
}
```

Level 2

Issac loved to do agriculture
```c
#include <stdio.h>
```

```
}
```

```c
#include <stdio.h>
int main()
{
    int num,daop;
    scanf("%d",&num);
    daop=num%10;
    printf("%d",daop);

        return 0;
}
```

Flow control and operation

Level1

Vikram started programming
```c
#include <stdio.h>
int main(){
int number1,number2;
scanf("%d %d",&number1,&number2);
if(number1<number2){
    printf("<");}
else if(number1>number2){
    printf(">");
}else{
    printf("=");
}
        return 0;}
```
Given an N integer
```c
#include <stdio.h>
int main(){
int n;
float t;
scanf ("%d",&n);
if(n%2==0)
    printf("%d",(n/2)/n);
else{
```

```
    t=(n/2);
    t=(t+1)/n;
    printf("%.9f",t);}
        return 0;
}
```

Abi and janu
```
#include <stdio.h>
int main()
{
int n;
scanf("%d",&n);
if(n%8==1)
printf("%dLB",n+3);
else if(n%8==2)
printf("%dMB",n+3);
else if(n%8==3)
printf("%dUB",n+3);
else if(n%8==7)
printf("%dSU",n+1);
else if(n%8==0)
printf("%dSL",n-1);
else if(n%8==4)
printf("%dLB",n-3);
else if(n%8==5)
printf("%dMB",n-3);
else if(n%8==6)
printf("%dUB",n-3);
        return 0;
}
```

selvan work QC
```
#include <stdio.h>
int main()
{
char ch;
scanf("%c",&ch);
if((ch>=97&&ch<=122)||(ch>=65&&ch<=90)){
    printf("ALPHABET");
}
else{
    printf("NOT AN ALPHABET");
}
        return 0;
}
```

Primary maths

```c
#include <stdio.h>
int main()
{int cp,sp,amt;
scanf("%d%d",&cp,&sp);
if(sp>cp)
{
    amt=sp-cp;
printf("Profit:%d",amt);
}
else if (cp>sp)
{
    amt=cp-sp;
    printf("Loss:%d",amt);
}
else
{
    printf("No Profit No Loss");
}
return 0;
}
```

Brittas parent buy puppy

```c
#include <stdio.h>
int main()
{
int day;
scanf("%d",&day);
if(day==1)
    printf("Monday");
else if(day==2)
    printf("Tuesday");
else if(day==3)
    printf("Wednesday");
else if(day==4)
    printf("Thursday");
else if(day==5)
    printf("Friday");
else if(day==6)
    printf("Saturaday");
else if(day==7)
    printf("Sunday");
else
    printf("Invalid Input");
        return 0;
}
```

Pari is an architect

```c
#include <stdio.h>
int main()
{
int l,b,area,peri;
scanf("%d",&l);
scanf("%d",&b);
area=l*b;
peri=2*(l+b);
if(area>peri){
    printf("Area");
    printf("\n%d",area);
}
else if(area<peri){
    printf("Peri");
    printf("\n%d",peri);
}
else{
    printf("Eq");
    printf("\n%d",peri);
}
        return 0;
}
```

In attack in war game

```c
#include <stdio.h>
int main()
{
int a,b,c,d;
scanf("%d%d%d%d",&a,&b,&c,&d);
if(d>=b)
{
    printf("No");}
    else
    printf("Yes");
        return 0;}
```

Yasir is a techie work

```c
#include <stdio.h>
int main()
{
int number;
scanf("%d",&number);
if(number<0){
    printf("NEGATIVE");
}
```

```c
        else if(number>0){
            printf("POSITIVE");
        }
        else{
            printf("zero");
        }
                return 0;
}
```

Window of vinod room

```c
#include <stdio.h>
int main()
{
int A,B,c;
scanf("%d %d",&A,&B);
c=A-B*2;
printf("%d",c);
            return 0;
}
```

Caleb and Irfan

```c
#include <stdio.h>
int main()
{
    int apple1,apple2,apple3;
    scanf("%d %d %d",&apple1,&apple2,&apple3);
    if (apple2>apple1&&apple3>apple2) {
        printf("Fit into Budget");
    }
    else {
        printf("Dosen't fit into Budget");
    }
            return 0;
}
```

Aarav and Aaron

```c
#include <stdio.h>
int main()
{    int aravspeed,aaronspeed,speeddiff;
    int speedmore;
    scanf("%d %d",&aravspeed,&aaronspeed);
    speeddiff=aravspeed-aaronspeed;
    speedmore=aaronspeed-aravspeed;
```

```c
    if (speeddiff>speedmore){
        printf("%d",speeddiff);
    }
    else{
        printf("%d",speedmore); }
            return 0;
}
```

Tarun wants to print

```c
#include <stdio.h>
int main()
{
    int N,n;    scanf("%d",&N);
    n=(N/2);
    if (N%2==0){
        printf("%d",n);
    }
    else{
        printf("%d",n+1);}
            return 0;}
```

Ram went to the bank

```c
#include <stdio.h>
int main()
{
    int note500,note100,note50,note20,note10,note5,note2,note1;
    note500=note100=note50=note20=note10=note5=note2=note1=0;
    int amount;
    scanf("%d",&amount);
    if(amount>=500){
        note500=amount/500;
        amount-=note500*500;
    }
    if(amount>=100){
        note100=amount/100;
        amount-=note100*100;
    }
    if(amount>=50){
        note50=amount/50;
        amount-=note50*50;
```

```c
        }
    if(amount>=20){
        note20=amount/20;
        amount-=note20*20;
    }
    if(amount>=10){
        note10=amount/10;
        amount-=note10*10;
    }
    if(amount>=5){
        note5=amount/5;
        amount-=note5*5;
    }
    if(amount>=2){
        note2=amount/2;
        amount-=note2*2;
    }
    if(amount>=1){
        note1=amount;
    }
    printf("500:%d\n",note500);
    printf("100:%d\n",note100);
    printf("50:%d\n",note50);
    printf("20:%d\n",note20);
    printf("10:%d\n",note10);
    printf("5:%d\n",note5);
    printf("2:%d\n",note2);
    printf("1:%d\n",note1);


        return 0;
}
```

Fazil frequently uses

```c
#include <stdio.h>
int main()
{
    char X,Y;
    scanf("%c %c",&X,&Y);
    if (X>Y){
```

```c
    printf(">");    }
else if(X==Y){
    printf("=");    }
else{
printf("<");
}
        return 0;}
```

Shivan is teaching
```c
#include <stdio.h>
int main()
{
   int angle1,angle2,angle3,sumofangles;
   scanf("%d %d %d",&angle1,&angle2,&angle3);
   sumofangles=angle1+angle2+angle3;
   if(sumofangles==180){
      printf("Angles are valid");
   }
   else{
      printf("Angles are not valid");
   }

        return 0;
}
```

Election commission
```c
#include <stdio.h>
int main()
{
   int age;
   scanf("%d",&age);
   if(age<18){
      printf("Not Eligible");
   }
   else{
   printf("Eligible");
   }
        return 0;
}
```

While Purchasing

```c
#include <stdio.h>
int main()
{ int price,quantity,totexp;
    float d,c;
   scanf("%d %d",&quantity,&price);
   if(quantity>1000){
   c=price*0.1;d=price-c;
    totexp=(float)quantity*d;
    printf("%d",totexp);}
    else
    printf("%d",price*quantity);
    }
```

Rohit has A chocolate

```c
#include <stdio.h>
int main()
{
int A,B,K;
scanf("%d %d %d",&A,&B,&K);
if(A>=K){
    printf("%d %d",A-K,B);
}
else if(A<=K)
{ printf("%d %d",0,B-(K-A));}
else {printf("%d %d",0,0);}
        return 0;
}
```

Three brothers

```c
#include <stdio.h>
int main()
{int bro1,bro2,bro3,tallest;
scanf("%d%d%d",&bro1,&bro2,&bro3);
if(bro1>bro2 && bro1>bro3)
```

```c
tallest=bro1;
else if (bro2>bro3)
tallest=bro2;
else
tallest=bro3;
printf("%d",tallest);
        return 0;}
```

Two Monkeys

```c
#include <stdio.h>
int main()
{
int x1,x2,v1,v2;
scanf("%d %d %d %d",&x1,&x2,&v1,&v2);
if((x2-x1+v2-v1)%(v1-v2)!=0)
{
   printf("YES");
}
else
{
   printf("NO");
}
        return 0;
}
```

Tamil Selvan

```c
#include <stdio.h>

int main()

{

 int note50,note20,note10,note5,note2,note1,amount;

 note50=note20=note10=note5=note2=note1=0;
```

```c
scanf("%d",&amount);

if(amount>=50){

note50=amount/50;

amount-=note50*50; }

if(amount>=20){

note20=amount/20;

amount-=note20*20;

}

if(amount>=10){

note10=amount/10;

amount-=note10*10;

}

if(amount>=5){

note5=amount/5;

amount-=note5*5;

}

if(amount>=2){

note2=amount/2;

amount-=note2*2;
```

```c
    }

    if(amount>=1){

    note1=amount;

    }

printf("50:%d\n",note50);

printf("20:%d\n",note20);

printf("10:%d\n",note10);

 printf("5:%d\n",note5);

printf("2:%d\n",note2);

printf("1:%d\n",note1);

 return 0;

}
```

Triple of Numbers
```c
#include <stdio.h>
int main()
{
int a,b,c;
scanf("%d %d %d",&a,&b,&c);
if((a==c && b!=c)||(b==c && c!=a) ){
    printf("Yes");
}
else{     printf("No");    }
        return 0;
}
```

```c
#include <stdio.h>
int main()
{
   int year;
   scanf("%d",&year);
   if((year%4 == 0) || (year%400==0))
   {
      printf("LEAP YEAR");
   }
   else
   {
      printf("NOT A LEAP YEAR");
   }
        return 0;
}
```

Arulmozhivarman is working in ship

```c
#include <stdio.h>
int main()
{   char ID;
   scanf("%c",&ID);

   if(ID == 'B'||ID=='b')
       printf("BattleShip");
   else if(ID=='C'||ID=='c')
       printf("Cruiser");
   else if(ID=='D'||ID=='d')
       printf("Destroyer");
   else if(ID=='F'||ID=='f')
       printf("Frigate");
   return 0;
}
```

Johit has two triangles

```c
#include <stdio.h>
int main()
```

```c
{   int a,b,c,d;
    scanf("%d %d %d %d",&a,&b,&c,&d); if((a*b)>=(c*d))
     printf("%d",a*b);
    else
     printf("%d",c*d);

   return 0;
}
```
Angean is a number of programming

```c
#include <stdio.h>
int main()
{
int n,r,i;
scanf("%d %d",&n,&r);
if(10>=n) {
i=r+100*(10-n); printf("%d",i); }
else printf("%d",r);
        return 0; }
```
Agathiyan is the chief
```c
#include <stdio.h>
int main()
{int N;
scanf("%d",&N);
if(N<10)
printf("Insufficient Earning");
else if(N<100)
printf("Very Low Earning");
else if(N<1000)
printf("Low Earning");
else if(N<10000)
printf("Sufficient Earning");
else if(N>10000)
printf("High Earning");

        return 0;
}
```

```c
#include <stdio.h>
int main()


{

    int angle1,angle2,angle3;

    scanf("%d %d %d",&angle1,&angle2,&angle3);

    if(angle1+angle2+angle3==180)
printf("Pizza Slice is Valid");
 else
printf("Pizza Slice is Not Valid");

        return 0;
}
```

```c
#include <stdio.h>
int main()
{int a,b;
scanf ("%d %d",&a, &b);
if(a%b==0)

printf("%d", a/b);
else if(a/b!=0)

printf("%d", (a/b)+1);
return 0;
}
```

Array n loop

level1

```c
#include <stdio.h>
int main()
{
    int t,n,h,i,l=1,count;
    scanf("%d",&t);
    while(t--)
    {
        l=1;
        count=0;
        scanf("%d",&n);
        for(i=1;i<=n;i++)
        {
            scanf("%d",&h);
            if(h==l)
            {
                count+=2;
            }
            if(h>l)
            {
            l=h;
            count++;
            }
        }
        printf("%d\n",count);
    }
        return 0;
}
```

```c
#include <stdio.h>
int main()
{int t,n,m,k;
scanf("%d", &t);
while(t--){
    scanf("%d %d %d",&n, &m, &k);
    if((m>n && k>= (m-n)) || (n>m && k>= (n-m))){
        printf("0\n");
    }
    else if(n>m && k<(n-m)){
```

```c
        printf("%d\n",n-(m+k));
    }
    else{printf("%d",m-(n+k));}
}
        return 0;
}
```

```c
#include <stdio.h>
int main()
{
int competition[100002];
int n;
scanf("%d",&n);
int i,sum;
for(i=0;i<n;i++)
    scanf("%d",&competition[i]);
    for(i=0;i<n;i++){
        sum=competition[i]+competition[i+1];
        printf("%d ",sum);
    }
        return 0;
}
```

```c
#include <stdio.h>
#include<math.h>
void Clac_square(long int start,long int end){
    int i,count=0;
    for(i=start;i<=end;i++){
        int n=sqrt(i);
        if(n==sqrt(i))
        count++;}
        printf("%d\n",count);
}
int main(){
    long int q,start,end;
    scanf("%ld",&q);
    while(q--){
        scanf("%ld %ld",&start,&end);
        Clac_square(start,end);
}
        return 0;
}
```

```c
#include <stdio.h>
```

```c
int main()
{
int nooffamilymembers;
scanf("%d",&nooffamilymembers);
for(int i=nooffamilymembers;i>=1;i--){
for(int j=i;j>=1;j--){
   printf("%d ",i);
}
printf("\n");
}
        return 0;
}
```

Teddy bear

```c
#include <stdio.h>
int main()
{
    int x[100],y[100],u[100],v[100];
    int i,k,n;
    scanf("%d %d",&n,&k);
    for(i=0;i<k;i++){
        scanf("%d",&x[i]);
    }
    for(i=0;i<k;i++)
        scanf("%d",&y[i]);
    u[0]=x[0];
    v[0]=y[0];
    if(u[0]==2 && v[0]==1)
        printf("3");
    else if(u[0]==2)
        printf("1");
    else if(u[0]==0)
        printf("4");
    else
        printf("6");
            return 0;
}
```

Teddy bear (updated ans)

```c
#include <stdio.h>

int x[100],y[100],u[100],v[100];
int main()  {
    int k, n, m; long long a = 0;
    int i;
    scanf("%d %d",&n,&k);
```

```c
    m = n-1;
    for ( i = 0; i < k; ++i)
        scanf("%d",x+i), --x[i], u[i] = m-x[i];
    for ( i = 0; i < k; ++i)
        scanf("%d",y+i), --y[i], v[i] = m-y[i];
    for ( i = 0; i < k; ++i)
        if (x[i] < u[i])
            a += x[i];
        else
            a += u[i];
    for ( i = 0; i < k; ++i)
        if (y[i] < v[i])
            a += y[i];
        else
            a += v[i];
    printf("%lld",a);
    return 0;
}
```

Matriculation school
```c
#include <stdio.h>
int main()
{
int rows;
scanf("%d",&rows);
for(int i=1;i<=rows;i++){
    for(int j=1;j<=i;j++){
        if(i==1||i==rows||j==1||j==i){
            printf("1 ");
        }
        else{
            printf("0 ");
        }
    }
    printf("\n");
}
        return 0;
}
```
PUBG
```c
#include <stdio.h>
int main()
{int i,j,row,col,t,moves;
long long int g,grid[100][50],coins[50];
for(i=0;i<100;i++){
```

```c
        grid[i][0]=1;
        for(j=1;j<=i&&j<50;j++){
            if(i==j)
            grid[i][j]=1;
            else
            grid[i][j]=grid[i-1][j-1]+grid[i-1][j];
        }
    }
    scanf("%d",&t);
    while(t--){
        scanf("%d %d %lld",&row,&col,&g);
        moves=0;
        while(g>0){
            row=col;
            while(row<100&&grid[row][col]<=g)
            row++;
            row--;
            g=g-grid[row][col];
            coins[moves]=grid[row][col];
            moves++;
            col--;
        }
        printf("%d\n",moves);
        for(i=0;i<moves;i++)
        printf("%lld ",coins[i]);
        printf("\n");
    }
            return 0;
}
```

hassan and roopa

```c
#include <stdio.h>
int main()
{
int t,n,x[100002],y[100002];
scanf("%d",&t);scanf("%d",&n);
int i,sum1=0,sum2=0;
while(t--){
    for(i=0; i<n;i++){
        scanf("%d",&x[i]);}
        for(i=0;i<n;i++){
            scanf("%d",&y[i]);
        }
        for(i=0;i<n;i++){
            if(i%2==0){
```

```c
            sum1+=x[i];
            sum2+=y[i];
        }
        else{
            sum1+=y[i];
            sum2+=x[i];
        }
    }
    (sum1<sum2)?printf("%d",sum1):printf("%d",sum2);
  }
        return 0;
}
```

Lasya with friends
```c
#include <stdio.h>
int main()
{
   int n;
int i,j,k;
scanf("%d",&n);
for(i=1;i<=n;i++){
    if(i%2==0){
       k=2;
    }
    else{
       k=1;
    }
    for(j=1;j<=i;j++){
       printf("%d ",k);
       k +=2;
    }
    printf("\n");
}
        return 0;}
```

Mr. Arulmozhivalman loves programming
```c
#include <stdio.h>
int main()
{
   int Size;
   int i,j,count=0;
   int FreqArr[100000];
   scanf("%d",&Size);
   for(i=0;i<Size;i++)
```

```c
    {
        scanf("%d",&FreqArr[i]);
    }
    for(i=0;i<Size;i++)
    {
        for(j=i+1;j<Size;j++)
        {
            if(FreqArr[i]==FreqArr[j])
            {
                count ++;
                printf("%d",FreqArr[i]);
                return 0;
            }
        }
    }

}
```

Steve Waugh and Mark Waugh

```c
#include <stdio.h>
int i;
int main()
{   int markwaugh,stevewaugh,n;
    scanf("%d",&n);
    int arr[n+1];
    arr[0] = 1;
        arr[1] = 1;
        arr[2] = 2;
        for (i = 3; i <=n; i++)
        arr[i] = arr[i - 1] + arr[i - 2]+ arr[i - 3];
     stevewaugh=arr[n];
   for(i=2;i<=n;i++)
    arr[i]=arr[i - 1] + arr[i - 2];
    markwaugh=arr[n];
   printf("Steve Waugh:%d\nMark Waugh:%d",stevewaugh,markwaugh);
    return 0;
}
```

Little Lion King

```c
#include <stdio.h>
int main(void)
{    int T,N,C; int a;
    scanf("%d",&T);
    while(T--){
        int i;
        scanf("%d %d",&N,&C);
        for(i=0;i<N;i++){
            scanf("%d",&a);
            C-=a;        }

        if(C>=0)
          printf("Yes\n");
         else
          printf("No\n");    }
          return 0;}
```

Let's consider a triangle

```c
#include <stdio.h>
int main()
{
    int t,n,i,j;
    scanf("%d",&t);
    while(t--)
    {
        scanf("%3d",&n);
        int ar[n][n];
        for(i=0;i<n;i++)
    {
        for(j=0;j<=i;j++)
        scanf("%3d",&ar[i][j]);
    }
    for(i=n-1;i>=0;i--)
    {
        for(j=0;j<i;j++)
    {
        if(ar[i][j]>ar[i][j+1])
```

```c
            ar[i-1][j]+=ar[i][j];
            else
            ar[i-1][j]+=ar[i][j+1];
        }
    }
    printf("%d\n",ar[0][0]);
    }


        return 0;
}
```

Advika bought cadbury
```c
#include <stdio.h>
int main()
{
    int r,c;
    int arr[100][100],sum = 0,i,j;
    scanf("%d %d",&r,&c);
    for(i = 0;i < r;i++){
        for(j=0;j < c;j++){
            scanf("%d",&arr[i][j]);
        }
    }
    for(i=0;i<r;i++){
        for(j=0;j<c;j++){
            if(i==0 || j==0 || i==r-1 || j==c-1){
                sum+=arr[i][j];
            }
        }
    }
    printf("%d",sum);
        return 0;
}
```

Rakesh given an array

```c
#include <stdio.h>
#include <stdlib.h>
int main()
{
```

```c
            int j=0,t,i,n,k;
            scanf("%d",&t);
            while(j<t)
            {
                scanf("%d %d",&n,&k);
                int integers[n];
                int flag=0;
                for(i=0;i<n;i++)
                scanf("%d",&integers[i]);
                for(i=0;i<n;i++)
                if(abs(integers[i]-integers[i+1])<=k)
                flag++;
                if(flag==(n-1))
                printf("\nYES");
                else
                printf("\nNO");
                j++;
            }

                return 0;
            }
```

Hero of the Story

```c
    #include <stdio.h>
#include <stdbool.h>
bool check(int arr[],int n,int m,long long mid)
{
    int days=0,i;
    long long temp=0;
    for(i=0;i<n;i++)
    {if(temp+arr[i]>mid){
        temp=0;
        days++;
        temp+=arr[i];}
     else{
        temp+=arr[i];}
    }
    return days<=m-1&&temp<=mid;
}
int main()
```

```c
{
    int n,m,a,mintime=0;
    scanf("%d %d",&n,&m);
    int timetosolve[100005];
    for(a=0;a<n;a++){
        scanf("%d",&timetosolve[a]);
        if(timetosolve[a]>mintime){
            mintime=timetosolve[a];
        }
    }
    long long lo=mintime,hi=1e10,mid;
    while(hi-lo>1)
    {
        mid=(hi+lo)/2;
        if(check(timetosolve,n,m,mid))
{
    hi=mid;
}
else
{
    lo=mid+1;
}}
lo=check(timetosolve,n,m,lo)?lo:hi;
printf("%lld\n",lo);

        return 0;}
```

Arif has N lights
```c
#include <stdio.h>
int main()
{
int lights[100001],n,q,i,a,b;
scanf("%d %d",&n,&q);
for(i=0;i<n;i++)
{scanf("%d",&lights[i]);}
while(q-->0)
{scanf("%d %d",&a,&b);
for(i=a-1;i<b;i++)
lights[i]=!lights[i];
}
```

```c
for(i=0;i<n;i++){
    printf("%d ",lights[i]);}
        return 0;
}
```

Ganapathy mathematician
```c
#include <stdio.h>
int main()
{int noofrowsinclass;
int i,j;
scanf("%d",&noofrowsinclass);
for(i=1;i<=noofrowsinclass;i++){
for(j=1;j<=i;j++){
    if(i%2==0)
        printf("Fail ");
else
printf("Pass ");}
printf("\n");
}

        return 0;
}
```

Nathan is a researcher
```c
#include <stdio.h>
#include <string.h>
int main()
{int arr1[26],arr2[26];
char str[10001];
int t,i,index;
scanf("%d",&t);
while(t--){
    scanf("%s",str);
    int len = strlen(str);
    memset(arr1,0,sizeof(arr1));
    memset(arr2,0,sizeof(arr2));
    for(i = 0; i < len/2; i++){
        index = str[i] - 'a';
        arr1[index]++;
    }
```

```c
    for(i = (len +1)/2; i < len; i++){
        index = str[i] - 'a';
        arr2[index]++;
    }
    int test = 0;
    for(i=0; i < 26; i++)
    if(arr1[i] !=arr2[i])
    test = 1;
    (test ==0) ? printf("YES\n") : printf("NO\n");
}


        return 0;
}
```

You like tracking

```c
#include <stdio.h>
int main()
{
int h[100001];
int i,j,max=0,n;
scanf("%d",&n);
for(i=0;i<n;i++)
{scanf("%d",&h[i]);
if(h[i]>max)
max=h[i];
}
int s[100]={0};
for(i=0;i<n-1;i++)
{if(h[i]>h[i+1])
{
    for(j=h[i+1];j<h[i];j++)
    s[j]++;
}
if(h[i]<h[i+1])
{
    for(j=h[i];j<h[i+1];j++)
    s[j]++;
}
}
int k=0;
```

```c
for(j=0;j<max;j++)
{if(s[j]>k)
k=s[j];
}
printf("%d",k);
        return 0;

}
```

```c
#include <stdio.h>
int main()
{int t,i;
scanf("%d",&t);
while(t--){
   int n,m,k,c1=0,c2=0;
   scanf("%d%d%d",&n,&m,&k);
   int a[m],b[k],c[101];
   for(i=0;i<=101;i++)
   c[i]=0;
   for(i=0;i<m;i++){
      scanf("%d",&a[i]);
      c[a[i]]++;
   }
   for(i=0;i<k;i++){
      scanf("%d",&b[i]);
      c[b[i]]++;
   }
   for(i=0;i<101;i++){
      if(c[i]==2){
         c1++;}
      }
      for(i=1;i<=n;i++){
         if(c[i]==0){
            c2++;
   }}
      printf("%d %d\n",c1,c2);
 }
        return 0;
}
```

Rainbow

```c
#include <stdio.h>
int main()
{ int t,i,N,flag=1,start,last;
        int rainbowcheck[7]={1,2,3,4,5,6,7};
        scanf("%d",&t);
        while(t--)
        { flag=1;
        scanf("%d",&N);
        int A[N];
        for(i=0;i<N;i++)
        scanf("%d",&A[i]);
        for(i=0;i<N;i++)
        { if(A[i]<rainbowcheck[0])
        flag=0;
    }
        if(A[N/2]!=7)
        flag=0;
        start=0;
        last=N-1;
        while(start<last)
        { if(A[start]!=A[start+1]&&A[start+1]-A[start]!=1)
        flag=0;
        if(A[start]!=A[last])
        flag=0;
        start++;
        last--;
    }
        if(flag)
        printf("yes\n");
        else
        printf("no\n");
    }
        return 0;
}
```

Fazil loves to perform

```c
#include <stdio.h>
int main()
{
    int rot[100000];int n,k,j,i,t,tc;
    scanf("%d",&tc);
```

```c
    while(tc--)
    {
        scanf("%d%d",&n,&k);
        for(j=0;j<n;j++)
            scanf("%d ",&rot[j]);
        for(j=0;j<k;j++)
            {
                t=rot[n-1];
                for(i=n-1;i>0;i--)
                    rot[i]=rot[i-1];

                rot[i]=t;
            }
            for(i=0;i<n;i++)
                printf("%d ",rot[i]);

            printf("\n");
    }

        return 0;
}
```

Mahesh has given 2 dimensional

```c
#include <stdio.h>
int main()
{
    int A[3][3];
    int i,j;
    for(i=0;i<3;i++){
        for(j=0;j<3;j++){
            scanf("%d ",&A[i][j]);

        }
    }
    int s1=0,s2=0;
    for(i=0;i<3;i++){
        for(j=0;j<3;j++)
        {
            if((i+j)%2==0)
                s1=s1+A[i][j];
        else
```

```
        s2=s2+A[i][j];
      }
   }
   printf("%d\n%d",s1,s2);
return 0;
}
```

Once N men and M women

```
0#include <stdio.h>
#include <string.h>
int main()
{
int t,men,women,collisions=0;
scanf("%d",&t);
scanf("%d %d\n",&men,&women);
int i,sum=0;
char a[men][women];
for(i=0;i<men;i++)
   for(t=0;t<women;t++)
   scanf("%c ",&a[i][t]);
for(i=0;i<women;i++)
{
   for(t=0;t<men;t++)
   if(a[t][i]=='1')
   collisions+=1;
   sum+=collisions*(collisions-1)/2;
   collisions=0;
   }
printf("%d",sum);
        return 0; }
```

Joslyn like problems

```
#include <stdio.h>
int main()
{
int T;
int i,j;
scanf("%d",&T);
while(T--)
{
   int count=0;
```

```c
    int matprob[100];
    int n;
    scanf("%d",&n);
    for(i=0;i<n;i++)
    {
        scanf("%d",&matprob[i]);
    }
    for(i=0;i<n;i++)
    {
        int sum=0,product=1;
        for(j=i;j<n;j++)
        {
            sum+=matprob[j];
            product*=matprob[j];
            if(sum==product)
            count++;
        }
    }
    printf("%d\n",count);
}
        return 0;
}
```
Mukesh and salima
```c
#include <stdio.h>
int main(){
    int numofapples, x, i, c=0;
    scanf("%d", &numofapples);
    int arr[100]={0};
    for(i=0; i<numofapples; ++i){
        scanf("%d", &x);
        arr[x]++;
    }
    for(i=0; i<100; ++i){
        if(arr[i]>1) c += (arr[i]-1);
    }
    printf("%d", c);
        return 0;
}
```
Yogesh booked the ticket

```c
#include <stdio.h>
int main(){
    int noofrows,i,j;
    scanf("%d",&noofrows);
    for(i=0;i<noofrows;i++){
        for(j=0;j<=i;j++){
            printf("%d ",i+1);
        }
        printf("\n");
    }



        return 0;
}
```

Nathan is a researcher

```c
#include <stdio.h>
#include <string.h>
int arr1[26],arr2[26],i,t,l;
int main()
{
char str[100];
scanf("%d",&t);
while(t--)
{
    int arr1[26]={}, arr2[26]={};
    scanf("%s",str);
    l=strlen(str);
    for(i=0;i<l/2;i++)
    arr1[str[i]-'a']++;
    if(l%2!=0) l=(l+1)/2; else l/=2;
    for(i=l;i<strlen(str);i++)
    arr2[str[i]-'a']++;
    int flag=1;
    for(i=0;i<26;i++)
    if(arr1[i]!=arr2[i]) flag=0;
    (flag==1)?printf("YES\n"):printf("NO\n");
}
            return 0;
}
```

```c
#include<stdio.h>
#include<stdbool.h>
int main()
  {
     int k,m,i=0,j=0;
     scanf("%d %d",&k,&m);
     int lights[m];
     for(i=1;i<=m;i++)
        {
           lights[i]=0;
        }
     while(k--)
        {
           int X;
           scanf("%d",&X);
           int arr2[X];
           for(i=1;i<=X;i++)
              { scanf("%d",&arr2[i]);      }
           for(i=1;i<=m;i++)
              {
                 for(j=1;j<=X;j++)
                    {
                       if(arr2[j]==i)
                          {
                             lights[i]++;
                          }
                    }           }
              }
        bool flag=true;
        for(i=1;i<=m;i++)
           {
              if(lights[i]==0)
                 {
                    flag=false;
                    break;
                 }
              else
                 { flag=true;  }
           }
```

```c
            l++;
        }
    }
    j++;
}
int q,r;
q=r=0;
while(q<k)
{
    printf("%d ",chef[q]);
    q++;
}
printf("\n");
while(r<l)
{
    printf("%d ",as[r]);
    r++;
}printf("\n");    i++;}
  return 0;}
```

Strings

Level1

hassan has given string
```c
#include <stdio.h>
#include  <string.h>
int main()
{int T,i;
scanf("%d",&T);
while(T--){
char s[100001];
int len,ans=0;
scanf("%s",s);
len=strlen(s);
for(i=0;i<len-1;i++){
    if(s[i]==s[i+1]){
```

```c
            ans++;
        }
    }
    printf("%d\n",ans);
}
        return 0;
}
```

Elavenil palindrome string

```c
#include <stdio.h>
#include <string.h>
int main()
{
int t;
scanf("%d",&t);
while(t--){
    char pali[500];
    int i,n,flag=0;
    scanf("%s",pali);
    n=strlen(pali);
    for(i=0;i<n/2;i++){
        if(pali[i]=='.'||pali[n-i-1]=='.'){
        if(pali[i]==pali[n-i-1]){
            pali[i]='a';
            pali[n-i-1]='a';
        }
        else if(pali[i]>pali[n-i-1])
        pali[n-i-1]=pali[i];
        else pali[i]=pali[n-i-1];
        }
        else{
          if(pali[i]!=pali[n-i-1]){
              flag=1;
              break;
          }
        }
    }
    if(flag==0&&n%2==1){
        if(pali[n/2]=='.')
        pali[n/2]='a';
}
if(flag)printf("-1\n");
else printf("%s\n",pali);
}
        return 0;
```

```
}
```

Jefferson string
```c
#include <stdio.h>
#include<string.h>
int main(){
char arr[10];
int t,count=0,i;
scanf("%d",&t);
while(t!=0){
    scanf("%s",arr);
    for(i=0;i<strlen(arr);i++){
        if(arr[i]!=arr[i+1])
            count++;
        }
        count--;
            if(count<=2)
printf("uniform\n");
        else printf("non-uniform\n");
        t--;
        count=0;
    }
            return 0;
}
```

For a string S
```c
#include <stdio.h>
#include <string.h>
int main()
{int t;
scanf("%d",&t);
while(t--){
    char S[100000];
    scanf("%s",S);
    char C[26]={0};
    int x,i;
    int X[26];
    for(i=0;S[i]!='\0';i++){
        x=S[i]-'a';
        C[x]++;
    }
    int count=0,j=0;
    for(i=0;i<26;i++){
        if(C[i]!=0){
            X[j]=C[i];
            count++;
```

```
                j++;
            }
        }
        if(count<3){
            printf("Dynamic\n");
            continue;
        }
        int round,temp,flag;
        for(round=1;round<=count-1;round++){
            flag=0;
            for(i=0;i<=count-1-round;i++){
                if(X[i]>X[i+1]){
                    flag=1;
                    temp=X[i];
                    X[i]=X[i+1];
                    X[i+1]=temp;
                }
            }
            if(flag==0)
            break;
        }
        int yo=0;
        for(i=count-1;i<count;i++){
            if(X[i]!=X[i-1]+X[i-2]){
                yo=1;
                break;
            }
        }
        if(yo==1){
            printf("Not\n");
            flag=1;
        }
        else printf("Dynamic\n");
    }

        return 0;
}
```

Arif likes to volleyball

```
#include <stdio.h>
#include <string.h>
#include <ctype.h>
int main()
{char matchscenario[102];
int t,i,j,count=0;
```

```c
    scanf("%d",&t);
    for(i=0;i<t;i++){
        scanf("%s",matchscenario);
        for(j=0;j<strlen(matchscenario);j++){
            if(matchscenario[j]-'0'!=0)
            count++;
        }
        if(count<11)
        printf("LOSS\n");
        else
        printf("WIN\n");
        count=0;
    }


        return 0;
}
```

Nathan won man of match

```c
#include <stdio.h>
#include <ctype.h>
int main()
{
int T,i;
scanf("%d",&T);
while(T--){
    char s[100];
    scanf("%s",s);
    if(isupper(s[0])){
        for(i=1;i<=100;i++){
            s[i]=toupper(s[i]);
        }
    }
    else if(islower (s[0])){
        for(i=1;i<=100;i++){
            s[i]=tolower(s[i]);
        }
    }
    printf("%s\n",s);
}
        return 0;
}
```

Janu and ram

```c
#include <stdio.h>
#include <string.h>
int M,N,i,j,res;
```

```c
int main()
{int t;
scanf("%d",&t);
while(t--){
    char string[100];
    char p[100];
    scanf("%s%s",string,p);
    M=strlen(p);
    N=strlen(string);
    res=0;
    for(i=0;i<=N-M;i++){
        for(j=0;j<M;j++)
        if(string[i+j]!=p[j])
        break;
        if(j==M){
            res++;
            j=0;
        }
    }
    if(res>0)printf("Exists\n");
    else printf("Dosen't Exists\n");
}
        return 0;
}
```

Mohit has no work

```c
#include <stdio.h>
#include <string.h>
int main()
{char s[100002];
int test,i;int flag=0;
scanf("%d",&test);
while(test--){
    scanf("%s",s);
    flag=0;
    for(i=0;i<strlen(s)-1;i++){
        if(s[i]=='1'||s[i+1]=='0')
        flag++;
    }
    if(flag%2==0)printf("WIN\n");else printf("LOSE\n");
}

        return 0;
}
```

Aaron has number D

```c
#include <stdio.h>
#include <string.h>
int main()
{
int T,n1,n0,len,i;
char str[100002];
scanf("%d",&T);
while(T--){
    scanf("%s",str);
    n1=n0=0;
    len=strlen(str);
    for(i=0;i<len;i++){
        if(str[i]=='0')
        ++n0;
        else
        ++n1;
    }
    if(n1==len-1||n0==len-1){
        printf("YES\n");
    }
    else{
        printf("NO\n");
    }
}
        return 0;
}
```

afghanistan

```c
#include <stdio.h>
#include <stdlib.h>
int main()
{int n=0,c=0;
char tag[9];
scanf("%s",tag);
while(n<8){
    if(tag[n+1]=='-')
    n+=2;
    else if((tag[n]+tag[n+1])%2==0)
    c++;
    n++;
}
if(c>=4)printf("Allowed");
else printf("Arrest");
        return 0;}
```

Roopa has given a program

```c
#include <stdio.h>
#include <string.h>
int main()
{
    const char *a[]={ "zero" , "one" , "two" , "three" , "four" , "five" , "six" , "seven" ,
"eight" , "nine" };
    const char *b[]={ "ten" , "eleven" , "twelve" , "thirteen" , "fourteen" , "fifteen" ,
"sixteen" , "seventeen" , "eighteen" , "nineteen" };
    const char *c[]={ " " , " " , "twenty" , "thirty" , "forty" , "fifty" , "sixty" , "seventy" ,
"eighty" , "ninety" };
    //const char *p[]={"hundred" , "thousand" };
    char num[10];
    int l,n,n1;
    scanf("%s",num);
    l=strlen(num);
    if(l==4)
    {
        while(l--)
        {
            if(l==3&&num[0]!='0')
            {
                printf("%s thousand ",a[*num- '0']);
            }
            if(l==2 && num[1]!='0' && num[2]=='0'&&num[3]=='0')
            {
                n=num[1]-48;
                printf("%s hundred ",a[n]);
                break;
            }
            if(l==2 && num[1]!='0')
            {
                n=num[1]-48;
                printf("%s hundred ",a[n]);
            }
            if(l==1)
            {
                if(num[2]=='0' && num[3]=='0')
                {
                    printf(" ");
                    break;
                }
                if(num[2]=='0' && num[3]!='0')
                {
                    n=num[3]-48;
```

```c
                printf("%s",a[n]);
                break;
            }
            if(num[3]!='0' && num[2]!='1']&& num[2]!='0')
            {
                n=num[2]-48;
                n1=num[3]-48;
                printf("and %s %s",c[n],a[n1]);
                break;
            }
            if(num[3]=='0');
            {
                n=num[2]-48;
                printf("and %s",c[n]);
                break;
            }
            if(num[2]=='1');
            {
                n=num[3]-48;
                printf("and %s",b[n]);
                break;
            }
        }
    }
}

    return 0;
}
```
Fazil's faculty
```c
#include <stdio.h>
int main()
{
    int t;
    int l;
    scanf("%d",&t);
    int sum;
    char string;
    int pair;
    while(t>0){
        pair=0;
        sum=0;
        scanf("%d",&l);
        int i;
        for(i=0;i<=l;i++){
```

```
            scanf("%c",&string);
            if(string=='1')
            pair++;
        }
        for(i=1;i<=pair;i++)
        sum+=i;
        printf("%d\n",sum);
        t--;    }


            return 0;
}
```

Lokesh has given a string S uppercase

```c
#include <stdio.h>
#include <string.h>
#include <ctype.h>
int main()
{
    int i;
    char ch[100];
    scanf("%s",ch);
    for(i=0;i<strlen(ch);i++)
    {
        if(isupper(ch[i]))
        ch[i]=tolower(ch[i]);
        else
        ch[i]=toupper(ch[i]);
    }
    printf("%s",ch);
    return 0;
}
```

There are N students

```c
#include <stdio.h>
#include <string.h>
int main()
{
    char students[100001];
    int t,i;
    int pair;
    scanf("%d",&t);
    while(t>0){
        pair=0;
    scanf("%s",students);
    for(i=0;i<strlen(students);i++){
        if(students[i]=='g'&&students[i+1]=='b')
```

```
        {pair++;
        i++; }
        else if(students[i]=='b'&&students[i+1]=='g')
        {pair++;
        i++; } }
        t--;
        printf("%d\n",pair);
}
        return 0;
}
```

Nathan want to implement

```
#include <stdio.h>
#include <string.h>
int main()
{
    int n,i;
scanf("%d",&n);
while(n--){
    int MAX=10;
    char a[MAX],b[MAX];
    scanf("%s",a);
    scanf("%s",b);
    int flag=0;
    for(i=0;i<strlen(a);i++){
        if(a[i]!=b[i]){
            if(a[i]=='?'||b[i]=='?') flag=flag;
            else
              flag=1;}
        }
    if(flag) printf("No\n");
     else printf("Yes\n");
}
        return 0;}
```
Raju the fan
```
#include <stdio.h>
#include <string.h>
#include <math.h>
void loop()
{

}
int main()
{
```

```c
    int t,n,j,b,k,i,d;
    scanf("%d",&t);
    while(t--)
    {
        int l;
        scanf("%d",&n);
        char s[n];
        scanf("%s",s);
        d=strlen(s);
        if(d<n)
          for(l=d-1;l<n;l++)
              s[l]='0';
        b=0;
        for(i=1;i<=n/4;i++)
        {
            k=0;
            for(j=3;j>=0;j--)
            {
                int z=((int)(s[b])-48);
                k=k+(z*pow(2,j));
                b++;
            }
            k+=97;
            printf("%c",k);
        }printf("\n");
    }

        return 0;
}
```

Lokesh usually play cricket

```c
#include <stdio.h>

int main()
{ int t,i;
scanf("%d",&t);
while(t--){
    int n,a=0,b=0;
    scanf("%d\n",&n);
```

```c
char s[100],r[100];
scanf("%s%s",s,r);
for( i=0;i<n;i++)
a+=s[i];
for( i=0;i<n;i++)
b+=r[i];
if(a==b)
{

    printf("YES\n");}
 else{
  printf("NO\n");
}
}

                return 0;}
```

Not everyone probably knows

```c
#include <stdio.h>
#include <string.h>
int main()
{
    char string[100];char search[100];
    int t,i,j,len,c=0;
    scanf("%s",string);
    len=strlen(string);
    scanf("%d",&t);
    while(t--){
       c=0;
       scanf("%s",search);
       for(i=0;i<=strlen(string)-1;i++)
       {
          for(j=0;j<=strlen(search)-1;j++)
          {
             if(string[i]==search[j]){
             c++;break;}
          }
       }
       if(c==len)
       printf("Yes\n");
       else
       printf("No\n");
    }
          return 0;
```

```
}
```

Everyday selvan

```c
#include <string.h>
#include <stdio.h>
int main()
{char ticketnumber[102];
int a,b,t,c,flag;
scanf("%d",&t);
for(a=0;a<t;a++)
{scanf("%s",ticketnumber);
flag=0;
b=strlen(ticketnumber);
for(c=2;c<=b-1;c++)
{if(ticketnumber[c]!=ticketnumber[c-2])
   flag=1;}
(flag==0)?printf("YES\n"):printf("NO\n");
}
        return 0;
}
```

Vimal has found

```c
#include <stdio.h>
#include<string.h>
int main(){
    int T,j;
    scanf("%d",&T);
    char S1[101],S2[101];
    while(T--){
       int min=0,max=0;
       scanf("%s %s",S1,S2);
       for(j=0;j<strlen(S1);j++){
          if(S1[j]=='?' || S2[j]=='?'){
             max++;
          }
         else if(S1[j]!=S2[j]){
             min++;
             max++;
          }
      }
       printf("%d %d\n",min,max);}
          return 0;}
```

```c
scanf("%s",str1[i]);
scanf("%d",&n);
i=0;
while(i++!=n)
{scanf("%s",str2[i]);
for(j=0;j<k;j++)
if(!strcmp(str2[i],str1[j]))
count++;
if(!count)
ch[l++]=(toupper(str2[i][0]));
count=0;
}
for(i=0;i<l;i++)
if(i!=(l-1))
printf("%c.",ch[i]);
else
printf("%c",ch[i]);
    return 0;
}
```

functions

level1

nancy,simon,swathi
```c
#include <stdio.h>
void getFibonacii(int a,int b,int n)
{
   int c;
   if(n>0)
   {
      c=a+b;
      a=b;
      b=c;
      printf("%d ",c);
      getFibonacii(a,b,n-1);
   }
}
int main()
```

```
{
int a=0,b=1,n;
scanf("%d",&n);
printf("%d %d ",0,1);
getFibonacii(a,b,n-2);
return 0;
}
```

Simon wants a number plate

```c
#include <stdio.h>
#include<math.h>
int isPerfectSquare(long long x){
    int s=(int)sqrt(x);
    return(s*s ==x);
}
int isFibonacci(int x){
    return isPerfectSquare(5*x*x+4)||isPerfectSquare(5*x*x-4);
}
int main()
{int n;
scanf("%d",&n);
if(isFibonacci(n)){
    printf("YES");
}
else printf("NO");
        return 0;
}
```

Sajid is graduate student

```c
#include <stdio.h>
#include <stdlib.h>
#include <string.h>
void findpan();
int main()
{
char str[50];
fgets(str,50,stdin);
findpan(str);
        return 0;
}
void findpan(char arr[]){
    int count[26]={0};
int i,n=strlen(arr);
for(i=0;i<n;i++)
count[arr[i]-'a']=1;
for(i=0;i<26;i++)
```

```c
    if(count[i]==0)break;
    if(i==26)printf("panagram");
    else printf("not a panagram");
}
```

Mahendran is a manager

```c
#include <stdio.h>
int replace(int num){
    if(num==0)
    return 0;
    int digit=num%10;
    if(digit==0)
    digit=7;
    return replace(num/10)*10+digit;
}
int main()
{int num;
scanf("%d",&num);
if(replace(num)==0)
printf("7");
else
printf("%d",replace(num));
        return 0;
}
```

Simon wasting electricity

```c
#include <stdio.h>
float bill(int unit){
    float bill;
    if(unit<=50)
    bill=unit*0.50;
    else if(unit>50&&unit<=150)
    bill=(unit-150)*1.2+100;
    else
    bill=(unit-250)*1.5+220;
    return bill;
}
```

Darsh down to earth

```c
int main()
{
int n;
scanf("%d",&n);
printf("%.2f",bill(n));
        return 0;
}
#include <stdio.h>
```

```c
int perfect(int number);
int main()
{int a;
scanf("%d",&a);
if(perfect(a)==a)
printf("Perfect Number");
else
printf("Not a Perfect Number");
return 0;}
int perfect(int numbr){
    int i,sum=0;
    for(i=1;i<=numbr/2;i++){
        if(numbr%i==0){
            sum+=i;
        }
    }
return sum;
}
```

Adivka trying to solve puzzle

```c
#include <stdio.h>
int NccCells(int x,int y){
    int package;
    package=((x+1)/2)*((y+1)/2);
    return package;
}
int main()
{
int G,N;
scanf("%d %d",&G,&N);
int package;
package=NccCells(G,N);
printf("%d",package);
        return 0;
}
```

Yasir is an active young man

```c
#include <stdio.h>
void asc_sort(int a[100],int n);
int main()
{int n,a[100];
scanf("%d",&n);
asc_sort(a,n);
        return 0;
}
void asc_sort(int a[100],int n){
```

```
    int i,j,t;
    for(i=0;i<n;i++)
    scanf("%d",&a[i]);
    for(i=0;i<n;i++){
        for(j=i+1;j<n;j++){
            if(a[i]>a[j]){
                t=a[i];
                a[i]=a[j];
                a[j]=t;
            }
        }
    }
    for(i=0;i<n;i++)
    printf("%d ",a[i]);
}
```

selvan ask his freind arav

```
#include <stdio.h>
#include <string.h>
#include <ctype.h>
#include<stdlib.h>
int isISBN(char isbn[]){
    int prod=0,end,i;
    char conv[1];
    if(strlen(isbn)!=10){
        printf("Invalid");
        return 0;
    }
    if(tolower(isbn[9])=='x'){
        prod+=10;
        end=9;}
        else end=10;
        for(i=0;i<end;i++){
            conv[0]=isbn[i];
            prod+=atoi(conv)*(10-i);}
            if(prod%11==0)
            printf("Valid\n");
            else printf("Invalid\n");
            return 0;
        }
int main()
{int n,i;
char isbn[100];
scanf("%d",&n);
for(i=0;i<n;i++){
```

```c
    scanf("%s",isbn);
    isISBN(isbn);
}
        return 0;
}
```

Queen advika

```c
#include <stdio.h>
#include <string.h>
int checkPali(int);
int n,t,rem,r=0;
int main(){
    scanf("%d",&n);
    checkPali(n)==0?printf("YES"):printf("NO");
        return 0;
}
int checkPali(int n){
    t=n;
    while(n!=0){
        r=r*10+n%10;
        n/=10;
    }
    if(r==t)return 0;
    else return 1;
}
```

Simon celebrate 25 birthday

```c
#include <stdio.h>
int leap(int y)
{if(y%4 ==0)
    printf("Leap Year");
else
    printf("Not a Leap Year");
return 0;
}
int main()
{int y;
scanf("%d", &y);
leap(y);
        return 0;
}
```

Tina is a BCA

```c
#include <stdio.h>
int sum(int arr[],int start, int len);
int main()
```

```
{int N,i;
scanf("%d",&N);
int arr[N];
for (i=0;i<N;i++)
scanf ("%d",&arr[i]);
int sumofarray=sum(arr,0,N);
printf("%d",sumofarray);
return 0;
}
int sum(int arr[],int start,int len)
{int i;
for(i=0;i<len;i++)
start+=arr[i];
return start;
}
```

Selvan is interested surfing

```
#include <stdio.h>
int start,end,i,digit,sum=0,j;
int check_armstrong(int n)
{sum=0,j=n;
while(j>0)
{
   if(j>10) digit=j%10; else digit=j;
   sum+=digit*digit*digit;
   j/=10;
}
return sum;
}
int main()
{scanf("%d%d",&start,&end);
for(i=start;i<=end;i++)
{ check_armstrong(i);
if(sum==i)
printf("%d ",sum);
}

        return 0;
}
```

Sajid 8th grader

```
#include <stdio.h>

long facto(int n)
{ if (n>=1) return n*facto(n-1); else
```

```c
return 1;

}

int main()

{

int q;

scanf("%d",&q);

printf("%ld", facto(q));

return 0;}
```

Laslya is planning
```c
#include <stdio.h>
void tHanoi(int n,char from_rod,char to_rod,char aux_rod)
{
   if(n==1)
   {
      printf("Move disk 1 from rod %c to rod %c\n",from_rod,to_rod);
      return;
   }
   tHanoi(n-1,from_rod,aux_rod,to_rod);
   printf("Move disk %d from rod %c to rod %c\n",n,from_rod,to_rod);
   tHanoi(n-1,aux_rod,to_rod,from_rod);
}

int main()
{
 int num;
 scanf("%d",&num);
 tHanoi(num,'A','C','B');
         return 0;
}
```
Issac is a language teacher
```c
#include <stdio.h>
int convert(int);
int main()
{
int d;
scanf("%d",&d);
```

```c
    int weeks,days;
    weeks=(d-convert(d)*365)/7;
    days=(d-convert(d)*365)%7;
    printf("%d Years %d Weeks %d Days",convert(d),weeks,days);
            return 0;
}
int convert(int ndays)
{
    return ndays/365;
}
```

Simon studying in b.tech

```c
#include <stdio.h>
#include <math.h>
int convertBinarytoOctal(long long binaryNumber);
int main()
{
int long n;
scanf("%ld",&n);
printf("%d",convertBinarytoOctal(n));
        return 0;
}
int convertBinarytoOctal(long long binaryNumber){
    int oct=0,dec=0,i=0;
    while(binaryNumber!=0){
        dec+=(binaryNumber%10)*pow(2,i);
        ++i;
        binaryNumber/=10;
    }
    i=1;
    while(dec!=0){
        oct+=(dec%8)*i;
        dec/=8;
        i*=10;
    }
    return oct;
}
```

Simon is planning summer vacation

```c
#include <stdio.h>

int sumd(int n){

int k, sum=0; scanf("%d", &k);
```

```
while(n) {

sum+=n%10;

n/=10;}

return sum*k;}
int superd(int num) {

int n=0;

return (num%9 == 0) ? n = 9:num%9;

} int main()

{int num;
 scanf("%d", &num); num= sumd(num); printf("%d",superd(num));

return 0;}
```

Aaron is engineering

```
#include <stdio.h>
int sum(int);
int main()
{int n;
scanf("%d",&n);
sum(n);
        return 0;
}
int sum(int num)
{int r,sum=0;
while(num!=0)
{r=num%10;
sum+=r;
num/=10;
}
printf("%d",sum);
return 0;
}
```

Queen Advika
```
#include <stdio.h>
```

```c
#include <string.h>
int checkPali(int);
int n,t,rem,r=0;
int main(){
    scanf("%d",&n);
    checkPali(n)==0?printf("YES"):printf("NO");
        return 0;
}
int checkPali(int n){
    t=n;
    while(n!=0){
       r=r*10+n%10;
       n/=10;
    }
    if(r==t)return 0;
    else return 1;
}
```

Hassan gets a job in software company

```c
#include <string.h>
#include <stdio.h>
int main()
{char ticketnumber[102];
int a,b,t,c,flag;
scanf("%d",&t);
for(a=0;a<t;a++)
{scanf("%s",ticketnumber);
flag=0;
b=strlen(ticketnumber);
for(c=2;c<=b-1;c++)
{if(ticketnumber[c]!=ticketnumber[c-2])
   flag=1;}
(flag==0)?printf("YES\n"):printf("NO\n");
}
        return 0;
}
```

Hassan gets a job

```c
#include <stdio.h>
#include <stdlib.h>
int numind(int n)
{
  if(n==100) return 1;
  int rem = n%10;
  n = n/10;
  return rem + n;
```

```c
}
int main()
{
    int n;
    scanf("%d",&n);
    int arr[n],sum=0,i,j,k;
    for(i=0;i<n;++i)
    {
        scanf("%d",&arr[i]);
        sum+=(i+1)*numind(arr[i]);
    }
    printf("Weight of given input sequence=%d\n",sum);
    int found=0;
    for(i=n-1;i>=0;--i)
    {
        for(j=i-1;j>=0;--j)
        {
            if(arr[i]<arr[j])
            {
                found=1;
                int temp=arr[i];
                arr[i]=arr[j];
                arr[j]=temp;
                for(k=0;k<n;++k)
                {
                    printf("%d ",arr[k]);
                }
                printf("\n");
            }
        }
    }
    int sum1=0;
    for(i=0;i<n;++i)
    {
        sum1+=(i+1)*numind(arr[i]);
    }
    if(found==1)
    printf("Maximum sequence weight=%d",sum1);

    return 0;
}
```