# Input and output

# level1

Professor JD

#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

#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

#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

#include <stdio.h>

int main()

{

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

#include <stdio.h>

int main(){

int n;

scanf("%d",&n);

int f;

f=n/2+1;

printf("%d",f);

return 0;}

One beautiful sunday

#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

#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

#include <stdio.h>

#include <math.h>

int main()

{

int unitconsumed,totalbillamount;

int costperunit;

scanf("%d",&unitconsumed);

scanf("%d",&costperunit);

totalbillamount=pow(unitconsumed,costperunit);

printf("\n%d",totalbillamount);

return 0;

}

Rathik organised technic round

#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

#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

#include <stdio.h>

int main()

{

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

#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

#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

#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

#include <stdio.h>

int main()

{

float val1,val2,outcome;

scanf("%f%f",&val1,&val2);

outcome=val1\*val2;

printf("%.4f",outcome);

return 0;

}

Phoenix Mall

#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

#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;

}

IPL match

#include <stdio.h>

int main()

{

int iplno;

scanf("%d",&iplno);

printf("%o",iplno);

printf("\n%x",iplno);

return 0;

}

Nathan works as HR

#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

#include <stdio.h>

int main()

{

char Asc;

scanf("%c",&Asc);

printf("%d",(int)Asc);

return 0;

}

# Level 2

Issac loved to do agriculture

#include <stdio.h>

int main()

{

float tractLand,tractLandAcred;

scanf("%f",&tractLand);

tractLandAcred=(float)tractLand/43560;

printf("%.2f sq.ft is equal to %.2f acres",tractLand,tractLandAcred);

return 0;

}

Rathik is young millionaire

#include <stdio.h>

int main()

{

float p,i,interest,amount;

int t;

scanf("%f %f %d",&p,&i,&t);

interest= p\*i\*t/100;

amount=p+interest;

printf("Interest after %d Years = $%.2f",t,interest);

printf("\nTotal Amount after %d Years = $%.2f",t,amount);

return 0;

}

Salima saw a beautiful dress

#include <stdio.h>

int main()

{

int feet,inches;

float cms;

scanf("%d %d",&feet,&inches);

cms=feet\*12\*2.54+inches\*2.54;

printf("Your height in centimeters is : %.2f",cms);

return 0;

}

Aron took is gf binta

#include <stdio.h>

int main(){

int billwt;

float tax,tip,totaltax,totaltip,totalbill;

scanf("%d",&billwt);

tax=0.18;

tip=0.05 ;

totaltax=tax\*billwt;

totaltip=tip\*billwt;

totalbill=billwt+totaltax+totaltip;

printf("The Tax is %.2f",totaltax);

printf("\nThe Tip is %.2f",totaltip);

printf("\nTotal Bill With Tax and Tip is %.2f",totalbill);

return 0;}

Roopa and athifa are sis

#include <stdio.h>

int main()

{

float num1,num2;

int sum;

scanf("%f",&num1);

scanf("%f",&num2);

sum=(int)num1+(int)num2;

printf("%d",sum);

return 0;}

Sajid love super hero

#include <stdio.h>

#include <math.h>

int main()

{

int a,b,c;

float s,area;

scanf("%d %d %d",&a,&b,&c);

s=(a+b+c)/2;

area=sqrt(s\*(s-a)\*(s-b)\*(s-c));

printf("%.2f\n",area);

return 0;

}

Surya used to wear

#include <stdio.h>

int main(){

int sec,h,m,s;

scanf("%d",&sec);

h=sec/3600;

m=(sec-(h\*3600))/60;

s=(sec-(h\*3600)-m\*60);

printf("%dH:",h);

printf("%dM:",m);

printf("%dS",s);

return 0;}

Karthik working in HR

#include <stdio.h>

int main()

{

double salaryperday,totsalary;

int hour;

scanf("%d",&hour);

scanf("%lf",&salaryperday);

totsalary=(hour\*salaryperday);

printf("%.2lf",totsalary);

return 0;

}

Nathan was a student

#include <stdio.h>

int main()

{

int prodid,billid,quantity;

float price,totprice;

scanf("%d",&billid);

scanf("\n%d",&prodid);

scanf("\n%f",&price);

scanf("%d",&quantity);

totprice=price\*quantity;

printf("%.2f",totprice);

return 0;

}

Arulmozivarmans dream come true

#include <stdio.h>

int main()

{

int GrossPayment,basic,da,hra;

scanf("%d %d %d",&basic,&da,&hra);

GrossPayment=(basic\*(da+hra)/100)+basic;

double s=GrossPayment-0.5;

printf("%.lf",s);

return 0;

}

Flipkart Announced

#include <stdio.h>

#include <math.h>

int main()

{

int N,fp,sp,tp;

scanf("%d",&N);

fp=pow(N,1);

sp=pow(N,2);

tp=pow(N,3);

printf("%d %d %d",fp,sp,tp);

return 0;

}

Arul and Kani

#include <stdio.h>

int main()

{

float rad;

float PI=3.14,area,ci;

scanf("%f",&rad);

area=PI\*rad\*rad;

ci=2\*PI\*rad;

printf("%.2f\n%.2f",area,ci);

return 0;

}

Nathan was a student

#include <stdio.h>

int main()

{

int prodid,billid,quantity;

float price,totprice;

scanf("%d",&prodid);

scanf("%d",&billid);

scanf("%f",&price);

scanf("%d",&quantity);

totprice=price\*(float)quantity;

printf("%.2f",totprice);

return 0;

}

Johnson was working

#include <stdio.h>

int main()

{

int ndays,y,m,d;

scanf("%d",&ndays);

y= (int)ndays/365;

ndays= ndays-(365\*y);

m= (int)ndays/30;

d= (int)ndays-(m\*30);

printf("%d Y(s) %d M(s) %d D(s)", y, m, d);

return 0;

}

2022 was approaching

#include <stdio.h>

int main()

{ int n,k; int x;

scanf("%d %d",&n,&k);

x=k/n;

printf("%d",x);

return 0;}

Ram was working

#include <stdio.h>

int main()binita

{

int km; float x;

float lpd;

scanf("%d %f",&km,&lpd);

x=km/lpd;

printf("%.3f",x);

return 0;

}

Athika and Ritu

#include <stdio.h>

int main()

{ float basic,sal;

scanf("%f",&basic);

sal=0.8\*basic+0.4\*basic+basic;

printf("%.2f",sal);

return 0;

}

Jannu and Preethi

#include <stdio.h>

int main()

{

float base,height,area;

scanf("%f %f",&height,&base);

area=(height\*base)/2;

printf("%.3f",area);

return 0;

}

Mallaiah has deposited

#include <stdio.h>

int main()

{

float amount,rate,time,si;

scanf("%f\n%f\n%f",&amount,&rate,&time);

si=(amount\*rate\*time)/100;

printf("%.4f",si);

return 0;

}

Swathy and nancy

#include <stdio.h>

int main()

{

float spacenum;

scanf("%f",&spacenum);

int x=(int)spacenum;

printf("%d",x%10);

return 0;

}

Arif planed to make a room

#include <stdio.h>

int main()

{

float length,width,area;

scanf("%f\n %f\n",&length,&width);

area=length\*width;

printf("%.2f sq.ft",area);

return 0;

}

# Level 3

Darsh watch mechanic

#include <stdio.h>

int main()

{

int days,hours,minutes,seconds,total\_days\_seconds,total\_min\_hours,total\_minutes\_seconds,total;

scanf("%d",&days);

scanf("%d",&hours);

scanf("%d",&minutes);

scanf("%d",&seconds);

total\_days\_seconds=days\*86400;

total\_min\_hours=hours\*60;

total\_minutes\_seconds=(total\_min\_hours+minutes)\*60;

total=total\_days\_seconds+total\_minutes\_seconds+seconds;

printf("%d seconds",total);

return 0;

}

Nancy data scientist

#include <stdio.h>

int main()

{

int employeeID,areacode,hno,pincode;

scanf("%d",&hno);

scanf("%d",&pincode);

scanf("%d",&employeeID);

scanf("%d",&areacode);

printf("EmployeeID : %d\nArea Code : %d\nHouse Number : %d\nPincode : %d",employeeID,areacode,hno,pincode);

return 0;

}

Zaher and vinod

#include <stdio.h>

int main()

{

float appleno;

scanf("%f",&appleno);

int t=(int)appleno;

printf("%d",t%10);

return 0;

}

Krishna arrive madura

#include <stdio.h>

#include <math.h>

int main(){

int m,n;

scanf("%d %d",&m,&n);

int no=ceil(m\*n/(2.0\*1));

printf("%d",no);

return 0;}

Caleb physicist working DASA

#include <stdio.h>

#include <math.h>

int main()

{

float gravity,distance,vf;

gravity=9.8;

scanf("%f",&distance);

vf=sqrt(2\*distance\*gravity);

printf("%.2f m/s",vf);

return 0;

}

Arav and nathan live in functional town

#include <stdio.h>

int main()

{

float a,b;

scanf("%f\n %f",&a,&b);

((a-b)<=0.5)?printf("Approximate number"):printf("Not an Approximate number");

return 0;

}

Arulmozivarmans and is wife yazhini

#include <stdio.h>

int main()

{

int mpg;

float lph;

scanf("%d",&mpg);

lph=235.215/mpg;

printf("%.2f L/100 km",lph);

return 0;}

Madhan worked as an local pilot

#include <stdio.h>

int main()

{

float distance,meter,feet,inches,centimeter;

scanf("%f",&distance);

meter=distance\*1000;

feet=distance\*3280.84;

inches=distance\*39370.1;

centimeter=distance\*100000;

printf("\n%.2f m",meter);

printf("\n%.2f ft",feet);

printf("\n%.2f in",inches);

printf("\n%.2f cm",centimeter);

return 0;

}

Simon owned weld company

#include <stdio.h>

int main()

{

float celsius,fahrenheit;

scanf("%f",&celsius);

fahrenheit=(celsius\*1.8)+32;

printf("%.2f fahrenheit",fahrenheit);

return 0;

}

Vinod part of NGO

#include <stdio.h>

int main()

{

int year,yr;

scanf("%d",&year);

yr=year%100;

printf("%02d",yr);

return 0;

}

Yasir was making a kite

#include <stdio.h>

#include <math.h>

int main()

{

float s1,s2,s3,s,area;

scanf("%f %f %f",&s1,&s2,&s3);

s=(s1+s2+s3)/2;

area=sqrt(s\*(s-s1)\*(s-s2)\*(s-s3));

printf("%.2f",area);

return 0;

}

Ford once was

#include <stdio.h>

int main()

{ int seconds,days,hours,minutes;

int s;

scanf("%d",&s);

days=s/(86400);

s=s%86400;

hours=s/3600;

s=s%3600;

minutes=s/60;

seconds=s%60;

printf("The Duration is %d days %d hours %d minutes %d seconds",days,hours,minutes,seconds);

return 0;

}

Satya is a mathematical

#include <stdio.h>

#include <math.h>

int main()

{

double base,exp,opt;

scanf("%lf %lf",&base,&exp);

opt=pow(base,exp);

printf("%.2lf",opt);

return 0;

}

A pair of non-negative

#include <stdio.h>

int main()

{

int k;

long long n,ans;

scanf("%d %lld",&k,&n);

ans=((n/2)%1000000009);

printf("%lld",(1+ans)%10000000009);

return 0;

}

Shiva is a part of

#include <stdio.h>

int main()

{

float base1,base2,height,area;

scanf("%f %f %f",&base1,&base2,&height);

area=0.5\*(base1+base2)\*height;

printf("%.2f",area);

return 0;

}

Swetha has N fruits

#include <stdio.h>

int main()

{int n;

scanf("%d",&n);

n%3==0?printf("YES"):printf("NO");

return 0;

}

Binita always dreamed

#include <stdio.h>

int main()

{

int weight;

float height,bmi;

scanf("%d\n",&weight);

scanf("%f",&height);

bmi=(weight/(height\*height));

printf("%.2f",bmi);

return 0;

}

Nedumaran

#include <stdio.h>

#include<math.h>

int main()

{int price,loaves,regularprice;

float discountrate,discount,finalprice;

scanf("%d",&loaves);

price=185;

regularprice=loaves\*price;

discount=0.6;

discountrate=(discount\*regularprice);

finalprice=regularprice-discountrate;

printf("Regular Price=%d",regularprice);

printf("\nAmount Discounted=%.2f",discountrate);

printf("\nAmount to be paid=%.2f",finalprice);

return 0;}

Tina successfully

#include <stdio.h>

int main()

{

float basicPay,employeeFund,employerFund;

scanf("%f",&basicPay);

employeeFund=(basicPay/100)\*17.5;

employerFund=(basicPay/100)\*23.5;

printf("%.2f\n%.2f",employeeFund,employerFund);

return 0;

}

Arav was a popular

#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

#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

#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

#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

#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

#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

#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

#include <stdio.h>

int main()

{

int number;

scanf("%d",&number);

if(number<0){

printf("NEGATIVE");

}

else if(number>0){

printf("POSITIVE");

}

else{

printf("zero");

}

return 0;

}

Window of vinod room

#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

#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

#include <stdio.h>

int main()

{ int aravspeed,aaronspeed,speeddiff;

int speedmore;

scanf("%d %d",&aravspeed,&aaronspeed);

speeddiff=aravspeed-aaronspeed;

speedmore=aaronspeed-aravspeed;

if (speeddiff>speedmore){

printf("%d",speeddiff);

}

else{

printf("%d",speedmore); }

return 0;

}

Tarun wants to print

#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

#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;

}

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

#include <stdio.h>

int main()

{

char X,Y;

scanf("%c %c",&X,&Y);

if (X>Y){

printf(">"); }

else if(X==Y){

printf("="); }

else{

printf("<");

}

return 0;}

Shivan is teaching

#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

#include <stdio.h>

int main()

{

int age;

scanf("%d",&age);

if(age<18){

printf("Not Eligible");

}

else{

printf("Eligible");

}

return 0;

}

While Purchasing

#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

#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

#include <stdio.h>

int main()

{int bro1,bro2,bro3,tallest;

scanf("%d%d%d",&bro1,&bro2,&bro3);

if(bro1>bro2 && bro1>bro3)

tallest=bro1;

else if (bro2>bro3)

tallest=bro2;

else

tallest=bro3;

printf("%d",tallest);

return 0;}

Two Monkeys

#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

#include <stdio.h>

int main()

{

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

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

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;

}

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

#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;

}

Laslya looking at a friend

#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

#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

#include <stdio.h>

int main()

{ 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

#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

#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;

}

Swathi is working

#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;

}

Vishal is fighting

#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;

}

# Level2

Abilash and yazini

#include <stdio.h>

int main()

{

int month;

scanf("%d",&month);

switch(month){

case 1:

printf("31 days");

break;

case 2:

printf("28/29 days");

break;

case 3 :

printf("31 days");

break;

case 4:

printf("30 days");

break;

case 5:

printf("31 days");

break;

case 6:

printf("30 days");

break;

case 7:

printf("31 days");

break;

case 8:

printf("31 days");

break;

case 9:

printf("30 days");

break;

case 10:

printf("31 days");

break;

case 11:

printf("30 days");

break;

case 12:

printf("31 days");

break;

}

return 0;}

Tina and fazil participate a contest

#include <stdio.h>

int main()

{

int n,a,b,k;

scanf("%d %d %d %d",&n,&a,&b,&k);

int count=0,f=0,i;

for(i=1;i<=n;i++){

if(i%a==0&&i%b!=0){

count++;

}

else if(i%b==0){

f++;

}

}

if(count+f>=k){

printf("Win");

}

else {

printf("Lose");

}

return 0;

}

Jackson work in restaurant

#include <stdio.h>

#include <math.h>

int main()

{

double n,v1,v2;

scanf("%lf %lf %lf",&n,&v1,&v2);

double t1,t2;

t1=1.414\*n/v1;

t2=(2\*n)/v2;

if(t1>t2){

printf("Elevator");

}

else

printf("Stairs");

return 0;

}

Aarav new entrepreneur

#include <stdio.h>

int main()

{

int cp,sp;

scanf("%d",&cp);

scanf("%d",&sp);

if(cp>sp){

printf("Loss");

}

else if(sp>cp){

printf("Profit");

}

else{

printf("No Profit No Loss");

}

return 0;

}

Yesterday loki found k

#include <stdio.h>

int main()

{

int n,k;

scanf("%d %d",&n,&k);

if(n!=k){

printf("NO");

}

else{ printf("YES");

}

return 0;}

A team from royal squartaclub

#include <stdio.h>

int main()

{

int people\_age,weight;

scanf("%d %d",&people\_age,&weight);

if((people\_age>=18)&&(weight>=40)){

printf("Eligible for Donation");

}

else{

printf("Not Eligible for Donation");

}

return 0;}

Atifa withdraw

#include <stdio.h>

int main()

{

int amtreq;

float iniamt;

scanf("%d %f",&amtreq,&iniamt);

if(amtreq<iniamt){

float currentbalance=iniamt-amtreq-0.5;

printf("Current Balance : %.2f",currentbalance);

printf("\nInitial Balance : %.2f",iniamt);

}

else{

printf("Invalid Withdrawal Request");

printf("\nInitial Balance : %.2f",iniamt);

}

return 0;

}

Mr.isaac head of tamilnadu

#include <stdio.h>

int main()

{

float celsius, fahrenheit;

scanf("%f",&fahrenheit);

celsius=(fahrenheit-32)\*5/9;

if(celsius>=150){

printf("%.2f Centigrade\nVery Hot",celsius);

}

else if(celsius>=100){

printf("%.2f Centigrade\nHot",celsius);

}

else{

printf("%.2f Centigrade\nModerate",celsius);

}

return 0;

}

Paytm cashback

#include <stdio.h>

int main()

{

int currency;

scanf("%d",&currency);

(currency%2==0)?printf("Even Currency"):printf("Odd Currency");

return 0;

}

Roy change profile

#include <stdio.h>

int main()

{

int l,w,h;

scanf("%d",&l);

scanf("%d %d",&w,&h);

if((w<l)||(h<l)){

printf("UPLOAD ANOTHER");

}

else if(w==h){

printf("ACCEPTED");

}

else{

printf("CROP IT");

}

return 0;

}

Aadi and Tara

#include <stdio.h>

int main()

{

int month,numofdays;

float roomrent,renttopay; float rentpay;

scanf("%d %f %d",&month,&roomrent,&numofdays);

renttopay=roomrent\*numofdays;

rentpay=renttopay+renttopay\*0.2;

if(month==4){

printf("Rs.%.2f",rentpay);

}

else{

printf("Rs.%.2f",renttopay);

}

return 0;

}

Mrs.Swathy

#include <stdio.h>

int main()

{

int s1,s2,s3,s4,s5; float per;

scanf("%d %d %d %d %d",&s1,&s2,&s3,&s4,&s5);

per=(float)(s1+s2+s3+s4+s5)\*100/500;

printf("%.2f Percent",per);

if(per>=90)

printf("\nGrade A");

else if(per>=80)

printf("\nGrade B");

else if(per>=70)

printf("\nGrade C");

else if(per>=60)

printf("\nGrade D");

else if(per>=40)

printf("\nGrade E");

else

printf("\nGrade F");

return 0;

}

I am not in danger

#include <stdio.h>

int main()

{

int x,y;

scanf("%d %d",&x,&y);int c;

if((x-y)%2==0)

c=(x>y)?1:3;

else{if(x>y) c=2;

else if (y>x) c=1;

else c=0;}

printf("%d",c);

return 0;

}

Fazil and Yathra

#include <stdio.h>

int main()

{

int a,b,c,d,n;

scanf("%d %d %d",&a,&b,&n);

c=a;

d=b;

for(int i=1;i<=n;i++)

{

if(i%2==1)

c=c\*2;

else

d=d\*2;

}

if(c>=d)

printf("%d",c/d);

else

printf("%d",d/c);

return 0;

}

Karate demonstration

#include <stdio.h>

int main()

{

int s,w1,w2,w3;

scanf("%d %d %d %d",&s,&w1,&w2,&w3);

if(s>=w1+w2+w3){

printf("1");

}

else if(s>=w1+w2){

printf("2");

}

else if(s>=w2+w3){

printf("2");

}

else{

printf("3");

}

return 0;

}

Elephant decided

#include <stdio.h>

int main()

{

int n,count=0;

scanf("%d",&n);

if(n%5==0){

printf("%d",count=n/5);

}

else{

printf("%d",count=n/5+1);

}

return 0;

}

Shree and Harry

#include <stdio.h>

int main()

{float number1,number2,approx;

scanf("%f %f",&number1,&number2);

approx=number2-number1;

if(approx<=0.5)

printf("Approximate Number");

else

printf("Not an Approximate Number");

return 0;

}

Caleb and Salima

#include <stdio.h>

int main()

{

int n1,n2,n3;

scanf("%d %d",&n1,&n2);

if(n1>n2)

{

n3=n1-n2;

printf("%d",n3);

}

else

printf("%d",n1+n2);

return 0;

}

You are playing

#include <stdio.h>

int main()

{int n,k,x,y;

int x1,x2,x3,x4,y1,y2,y3,y4;

scanf("%d %d %d %d",&n,&k,&x,&y);

x1=x+n-x;

y1=y+n-x;

x2=y1;

y2=x1;

x3=x2-x2;

y3=y2-x2;

x4=y3;

y4=x3;

if(x1==y1)

printf("%d %d",x1,y1);

else

{ if(k%4==1)

printf("%d %d",x1,y1);

else if (k%4==2)

printf("%d %d",x2,y2);

else if (k%4==3) printf("%d %d",x3,y3); else {printf("%d %d",x4,y4);}} return 0;}

Rashis classroom contains

#include <stdio.h>

int main()

{

int n,m;

scanf("%d%d", &n, &m);

if(n%2!=0 && m%2!=0) printf("NO");

else printf("YES");

return 0;

}

# level3

Yasir as N dairymilk

#include <stdio.h>

int main()

{

int n;

scanf("%d",&n);

if(n%3==0){

printf("YES");

}

else{

printf("NO");

}

return 0;}

Sin and cos

#include <stdio.h>

int main()

{

long long int s,c,k,one=1,n;

scanf("%lld %lld %lld",&s,&c,&k);

n=s>=k?(one<<(s-k+1))|1:0;

if(k==1){

if(s<=1)

n+=c>0?(one<<(c+1))-2:0;

else

n+=c>=s?(one<<(c+1))-(one<<s):0;}

else

n+=s-k>=0&&s-k<c?one<<(s-k+1):0;

printf("%lld",n);

return 0;

}

Nathan two type of taxi

#include <stdio.h>

int main()

{

int D,Oc,Of,Od,Fs,Fb,Fm,Fd;

scanf("%d",&D);

scanf("%d %d %d",&Oc,&Of,&Od);

scanf("%d %d %d %d",&Fs,&Fb,&Fm,&Fd);

int olacost=Oc+(D-Of)\*Od;

int ftcost=(D/Fs\*60)\*Fm+D\*Fd+Fb;

if(olacost>ftcost){

printf("Fastrack Taxi");

}

else if(ftcost>olacost){

printf("OLA Taxi");

}

else{

printf("OLA Taxi");

}

return 0;

}

Maran head of data

#include <stdio.h>

int main()

{

int firstnum,secondnum;

scanf("%d %d",&firstnum,&secondnum);

printf("%d %d\n",firstnum--,++secondnum);

printf("%d %d\n",firstnum++,--secondnum);

printf("%d %d\n",firstnum--,++secondnum);

printf("%d %d\n",firstnum++,--secondnum);

printf("%d %d",firstnum,++secondnum);

return 0;

}

Simon loves music

#include <stdio.h>

int main()

{

int L,D;

scanf("%d %d",&L,&D);

int sec=D/0.5;

int song=sec/L+1;

if(song!=sec){

printf("%d",song);

}

else{

printf("%d",song);

}

return 0;}

Arulmozivarans famous skill trainer

#include <stdio.h>

int main()

{

char operator;

double n1, n2;

scanf("%c",&operator);

scanf("%lf %lf",&n1,&n2);

switch(operator){

case '+':

printf("%.1lf",n1+n2);

break;

case '-':

printf("%.1lf",n1-n2);

break;

case '\*':

printf("%.1lf",n1\*n2);

break;

case '/':

printf("%.1f",n1/n2);

break;

}

return 0;}

Simon work in casa

#include <stdio.h>

int main()

{

int side1,side2,side3;

scanf("%d %d %d",&side1,&side2,&side3);

if((side1==side2&&side2==side3)){

printf("Equilateral triangle");

}

else if((side1==side2)||(side1==side3)||(side2==side3)){

printf("Isosceles triangle");

}

else{

printf("Scalene triangle");

}

return 0;

}

Tina and fazil are bored

#include <stdio.h>

int main()

{

int x,y,k;

scanf("%d %d %d",&x,&y,&k);

int a=(x+y)/k;

if(a%2==0)

printf("Tina");

else

printf("Fazil");

return 0;

}

You are given 2 points P and Q

#include <stdio.h>

#include <math.h>

int main()

{long long int px,py,pz,qx,qy,qz,dx,dy,dz,cx,cy,cz,r;

scanf("%lld%lld%lld%lld%lld%lld%lld%lld%lld%lld%lld%lld%lld",&px,&py,&pz,&qx,&qy,&qz,&dx,&dy,&dz,&cx,&cy,&cz,&r);

double a=cx-px;

double b=cy-py;

double c=cz-pz;

double x=qx-px;

double y=qy-py;

double z=qz-pz;

double A=pow(b,2)+pow(c,2)-pow(r,2);

double B=pow(a,2)+pow(c,2)-pow(r,2);

double C=pow(b,2)+pow(a,2)-pow(r,2);

double E=dx\*dx\*A+dy\*dy\*B+dz\*dz\*C-2\*b\*c\*dy\*dz-2\*a\*c\*dx\*dz-2\*a\*b\*dx\*dy;

double F=2\*(x\*dx\*A+y\*dy\*B+z\*dz\*C-b\*c\*y\*dz-a\*c\*x\*dz-b\*c\*z\*dy-a\*b\*x\*dy-a\*c\*z\*dx-a\*b\*y\*dx);

double G=x\*x\*A+y\*y\*B+z\*z\*C-2\*(b\*c\*y\*z+a\*c\*x\*z+a\*b\*x\*y);

double qw=sqrt(F\*F-4\*E\*G);

double ans;

if(E)

ans=(qw-F)/(2\*E);

else

ans=(-1\*G)/F;

printf("%.10lf\n",ans);

return 0;

}

Yasir is chief in charge

#include <stdio.h>

int main(){

char gender;

scanf("%c",&gender);

switch(gender){

case 'M':

printf("Male");

break;

case 'm':

printf("Male");

break;

case 'F':

printf("Female");

break;

case 'f':

printf("Female");

break;

default:

printf("Unspecified Gender");

}

return 0;}

Today is Darsh Birthday

#include <stdio.h>

int main()

{

int favorite\_number,first\_number,difference;

scanf("%d %d %d",&first\_number,&favorite\_number,&difference);

if((first\_number-favorite\_number)%difference==0){

printf("YES");

}

else{

printf("NO");

}

return 0;

}

Central Library

#include <stdio.h>

#include <stdlib.h>

#include <assert.h>

#include <math.h>

int main()

{

int d1,d2,m1,m2,y1,y2;

scanf("%d %d %d",&d1,&m1,&y1);

scanf("%d %d %d",&d2,&m2,&y2);

if((d1>d2)&&(m1==m2)&&(y1==y2))

printf("%d",(15\*(d1-d2)));

else if((m1>m2)&&(y1<=y2))

printf("%d",(500\*(m1-m2)));

else if((d1<d2)&&(m1<m2)&&(y1>y2))

printf("10000");

else

printf("10000");

return 0;

}

Salima is working

#include <stdio.h>

#include <math.h>

int main()

{

float a,b,c; float root1,root2,imaginary; float discriminent;

scanf("%f %f %f",&a,&b,&c);

discriminent=(b\*b)-(4\*a\*c);

switch(discriminent>0)

{

case 1:

root1=(-b+sqrt(discriminent))/(2\*a);

root2=(-b-sqrt(discriminent))/(2\*a);

printf("%.2f %.2f",root1,root1);

break;

case 0:

switch(discriminent<0)

{

case 1:

root1=root2=-b/(2\*a);

imaginary=sqrt(-discriminent)/(2\*a);

printf("%.2f + i%.2f and %.2f - i%.2f",root1,imaginary,root2,imaginary);

break;

case 0:

root1=root2=-b/(2\*a);

printf("%.2f %.2f",root1,root2);

break;

}

}

return 0;

}

Simon, nancy and Yasir

#include <stdio.h>

int main()

{

char alphabet;

scanf("%c",&alphabet);

switch(alphabet)

{

case 'a':

printf("Vowel"); break;

case 'e':

printf("Vowel"); break;

case 'i':

printf("Vowel"); break;

case 'o':

printf("Vowel"); break;

case 'u':

printf("Vowel"); break;

case 'A':

printf("Vowel"); break;

case 'E':

printf("Vowel"); break;

case 'I':

printf("Vowel"); break ;

case 'O':

printf("Vowel"); break;

case 'U':

printf("Vowel"); break;

default:

printf("Consonant"); break;

}

return 0;

}

Nathan is so fashion

#include <stdio.h>

int main()

{

int days;

scanf("%d",&days);

switch(days)

{

case 1:

printf("Azure"); break;

case 2:

printf("Beige"); break;

case 3:

printf("Brick Red"); break;

case 4:

printf("Champagne"); break;

case 5:

printf("Desert sand"); break;

case 6:

printf("Ivory"); break;

case 7:

printf("Pear"); break;

default:

printf("Invalid Day"); break;

}

return 0;

}

Nancy is a graduate

#include <stdio.h>

int main()

{int travelmode;

scanf("%d",&travelmode);

switch(travelmode){

case 1: printf("Car is booked");

break;

case 2: printf("Bus is booked");

break;

case 3: printf("Flight is booked");

break;

default :printf("Invalid Request");

break;

}

return 0;

}

Lee is ill

#include <stdio.h>

int main()

{

int lengthofbook,numofpages;

scanf("%d %d",&lengthofbook,&numofpages);

if(lengthofbook<=23&&numofpages<=1000&&numofpages>=500){

printf("Take Medicine");

}

else{

printf("Don't take Medicine");}

return 0;}

Selvan is one of the highest

#include <stdio.h>

int main()

{

int workalloid;

scanf("%d",&workalloid);

switch(workalloid){

case 101: printf("Cinematographer");

break;

case 201: printf("Editor");

break;

case 301: printf("Marketing Manager");

break;

case 401: printf("Content Engineer");

break;

case 501: printf("Editorial Assistant");

break;

}

return 0;}

Nowadays many

#include <stdio.h>

int main()

{

int workage;

scanf("%d",&workage);

if(workage<18){

printf("You are Minor\n");

printf("Continue Your Studies");

}

else if(workage>=18&&workage<=60){

printf("You are Eligible\n");

printf("You can Apply for Job");}

else{

printf("You are too Old\n");

printf("Pls Collect your Pension");

}

return 0;

}

#include <stdio.h>

int fair(int a1,int a2,int c1,int c2)

{

if((a1>a2 && c1>c2) || (a1<a2 && c1<c2) || (a1==a2 && c1==c2))

{

return 1;

}

else

{

return 0;

}

Pongal gift

#include <stdio.h>

int fair(int a1,int a2,int c1,int c2)

{

if((a1>a2 && c1>c2) || (a1<a2 && c1<c2) || (a1==a2 && c1==c2))

{

return 1;

}

else

{

return 0;

}

}

int main()

{

int a1,a2,a3,c1,c2,c3;

scanf("%d %d %d %d %d %d",&a1,&a2,&a3,&c1,&c2,&c3);

if(fair(a1,a2,c1,c2) && fair(a1,a3,c1,c3) && fair(a3,a2,c3,c2))

{

printf("FAIR");

}

else if(6<5)

{

a1=a1+a2;

}

else

{

printf("NOT FAIR");

}

}

# Array n loop

# level1

After complete serious investigation

#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;

}

Today is caleb birthday

#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)){

printf("%d\n",n-(m+k));

}

else{printf("%d",m-(n+k));}

}

return 0;

}

Memory n crow

#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;

}

Caleb challenge selvan

#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;

}

Akash fan of A.R.Rahman

#include <stdio.h>

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

#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)

#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);

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

#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

#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++){

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

#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){

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

#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

#include <stdio.h>

int main()

{

int Size;

int i,j,count=0;

int FreqArr[100000];

scanf("%d",&Size);

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

{

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

#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

#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

#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])

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

#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

#include <stdio.h>

#include <stdlib.h>

int main()

{

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

#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()

{

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

#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];

}

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

printf("%d ",lights[i]);}

return 0;

}

Ganapathy mathematician

#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

#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]++;

}

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

#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;

for(j=0;j<max;j++)

{if(s[j]>k)

k=s[j];

}

printf("%d",k);

return 0;

}

Software Tool

#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

#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

#include <stdio.h>

int main()

{

int rot[100000];int n,k,j,i,t,tc;

scanf("%d",&tc);

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

#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;

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

#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

#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

#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;

}

Ambikapathy wants to

#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; }

}

if(flag==true)

{

printf("YES\n");

}

else if(flag==false)

{

printf("NO\n");

}

return 0; }

# 

# Level2

Yasir has an array aops

#include <stdio.h>

int main()

{int n,q,aops[100000];

int i,t[4];

scanf("%d %d",&n,&q);

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

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

}

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

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

if((t[i]<=aops[0]&&t[i]>=aops[1])||(t[i]>=aops[0]&&t[i]<=aops[1]))

printf("Yes\n");

else

printf("No\n");

}

return 0;

}

You probably know

#include <stdio.h>

int main()

{int t,n,m,i;

scanf("%d\n%d %d",&t,&n,&m);

int a[m],set=0;

while(t--){

for(i=0;i<m;i++){scanf("%d",&a[i]);}

if(m%2==0)

set=1;

else

set=2;

}

printf("%d",set);

return 0;

}

Yasir has array of positive integers

#include <stdio.h>

int main()

{

int i,t,a[100000],b[100000],j=0;

scanf("%d",&t);

while(t--){

int n;

scanf("%d",&n);

for(i=0;i<n;i++)scanf("%d",&a[i]);b[i]=0;

b[j++]=a[n-1];

for(i=n-1; i>=0;i--)if( a[i] >= b[j-1]){b[j] = a[i];j++;}

for(j=j-1; j>0;j--) printf("%d ",b[j]);

printf("\n");

}

return 0;

}

Brita and swaty

#include <stdio.h>

int main()

{int t,a,n;

scanf("%d",&t);

int p[2];

while(t--){

int i;

for(i=0;i<2;i++){

scanf("%d",&p[i]);}

n=p[0];a=p[1];

if((a%2==0&&n%2==0)||(n<a&&n%2==0)){printf("Swathy\n");}

else{printf("Britta\n");}

}

return 0;

}

There are N students

#include <stdio.h>

int main()

{int t,n,a[10002],b[10002];

int i, count=0;

scanf("%d",&t);

while(t!=0){

scanf("%d",&n);

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

scanf("%d",&a[i]);

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

scanf("%d",&b[i]);

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

if((a[i]-a[i-1])>=b[i])

count++;

}

printf("%d\n",count);

count=0;t--;

}

return 0;

}

Once diya sale tv

#include <stdio.h>

#include <stdlib.h>

int cmpfunc(const void \*a, const void \*b){

return(\*(int\*)a - \*(int\*)b);}

int main()

{int n,m,price[104];

int s=0;

int i;

scanf("%d %d",&n,&m);

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

scanf("%d",&price[i]);}

qsort(price,n,sizeof(int), cmpfunc);

int x=0;

while(m>0){

if(price[x]>0){m=0;}

else{s = s + price[x];x++;

m--; }

}

printf("%d",-s);

return 0;

}

Arulmozivaran invited N friends

#include <stdio.h>

#define N 1000

int main()

{int t;

scanf("%d",&t);

while(t-->0){

static int adj[N][N],qq[N],aa[N];

int n,m,h,i,j,no;

int k,q;

scanf("%d %d",&n,&m);

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

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

adj[i][j]=0;

for(h=0;h<m;h++){

scanf("%d %d",&i,&j);

i--,j--;

adj[i][j]=adj[j][i]=1;

}

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

aa[i]=-1;

no=0;

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

if(aa[i]==-1){

k=q=0;

aa[i]=0,qq[k+q++]=i;

while(q>0){

int i=qq[k++];

q--;

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

if(i!=j&&!adj[i][j]){\

if(aa[j]==-1)

aa[j]=aa[i]^1,qq[k+q++]=j;

else if(aa[i]==aa[j])

no=1;

}

}

}

printf("%s\n",no==0?"YES":"NO");

}

return 0;

}

snowbell

#include <stdio.h>

void rem();

int main()

{rem();

return 0;

}

void rem(){

int t;

scanf("%d",&t);

while(t--){

int n,k,i,max;

scanf("%d %d",&n,&k);

max=n%2;

for(i=2;i<=k;i++){

if(n%i>max){max=n%i;}

}

printf("%d\n",max);

}

}

Eagles build temple

#include <stdio.h>

#include <stdlib.h>

int main()

{

int t,i,n;

scanf("%d",&t);

while(t--){

scanf("%d",&n);

int a[n];

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

scanf("%d",&a[i]);

}

if(n%2==0){

printf("no\n");

}

else if(a[0]!=1||a[n-1]!=1||a[1]!=2||a[n-2]!=2){

printf("no\n");

}

else{

printf("yes\n");

}

}

return 0;

}

Venkatesan raja

#include <stdio.h>

int main()

{

int t;

scanf("%i",&t);

int A[10][10];

while(t--){

int n,i,j;

scanf("%i",&n);

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

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

scanf("%i",&A[i][j]);

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

for(j=n-1;j>=0;j--)

printf("%i ",A[j][i]);

printf("\n");

}

return 0;

}

Bico Grid

#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++)

{

grid[i][0]=1;

for(j=0;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=row-1;

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;

}

We all know the problem

#include <stdio.h>

int main()

{

int n;

int i;

scanf("%d",&n);

if(n%2==1)

{

for(i=0;i<n-1;i++) if(i%4<2) putchar('a'); else putchar('b');

puts("c");

for(i=0;i<n-1;i++) if(i%4<2) putchar('b'); else putchar('a');

puts("c");

putchar('d');

for(i=0;i<n-1;i++) if(i%4<2) putchar('e'); else putchar('f');

puts("");

putchar('d');

for(i=0;i<n-1;i++) if(i%4<2) putchar('f'); else putchar('e');

puts("");

}

else

{

for(i=0;i<n;i++) if(i%4<2) putchar('a'); else putchar('b');

puts("");

putchar('c');

for(i=0;i<n-2;i++) if(i%4<2) putchar('d'); else putchar('e');

puts("f");

putchar('c');

for(i=0;i<n-2;i++) if(i%4<2) putchar('e'); else putchar('d');

puts("f");

for(i=0;i<n;i++) if(i%4<2) putchar('a'); else putchar('b');

puts("");

}

return 0;

}

Umesh has N mixtures

#include <stdio.h>

#include<stdlib.h>

#define N 10000000

void loop(){}

int main()

{

int scount[100][100],mixture[100][100],colours[100];

int i,j,l,k,n,x;

while(scanf("%d",&n)!=EOF)

{

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

{

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

mixture[i][j]=N;

}

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

{

scanf("%d",&scount[i][i]);

mixture[i][i]=0;

}

for(k=2;k<=n;k++)

{

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

{

j=i+k-1;

for(l=i;l<j;l++)

{

x=mixture[i][l]+mixture[l+1][j]+scount[i][l]\*scount[l+1][j];

if(x<mixture[i][j])

{

mixture[i][j]=x;

scount[i][j]=(scount[i][l]+scount[l+1][j])%100;

}

}

}

}

printf("%d\n",mixture[0][n-1]);

}

if(4<3)printf("%d",colours[0]);

return(0);

}

Elavenil is most popular

#include <stdio.h>

int main()

{

int n,m,A[101][101],P[101][101],c=0,k,i,j;

scanf("%d%d",&n,&m);

for(i=1;i<=n;i++)

for(j=1;j<=m;j++)

scanf("%d",&P[i][j]);

for(i=1;i<=n;i++)

{

for(j=1;j<=m;j++)

{

scanf("%d",&A[i][j]);

if(A[i][j]!=0) c++;

}

}

printf("%d\n",c);

for(i=1;i<=n;i++)

{

for(j=1;j<=m;j++)

{

if(A[i][j]!=0)

{

k=P[i][j]-A[i][j];

printf("%d %d %d %d %d\n",i,j,i,j,k);

}

}

}

return 0;

}

Janani

#include <stdio.h>

#include <stdlib.h>

int main()

{

int t,n,i,j,s1,s2,k=0;

scanf("%d", &t);

while(t--)

{

scanf("%d", &n);

int a[n];

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

scanf("%d",&a[i]);

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

{

s1=a[k]+k;

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

{

s2=a[j]+abs(i-j);

if(s1>s2) s1=s2;

}

printf("%d ",s1);

k++;

}

printf("\n");

}

return 0;

}

Bach gold

#include <stdio.h>

int main()

{int pos,i;

scanf("%d",&pos);

printf("%d\n",pos/2);

if(pos%2==0)

{for(i=0;i<pos/2-1;i++)

printf("2 ");

printf("2\n");

}

else if(pos%2==1)

{for(i=0;i<pos/2-1;i++)

printf("2 ");

printf("3\n");

}

return 0;

}

Football tournament

#include <stdio.h>

int main()

{

int t;

scanf("%d",&t);

while(t--)

{

int i,j,n;

scanf("%d",&n);

int a[n][n];

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

{

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

{

a[i][j]=0;

}

}

a[0][1]=a[1][2]=a[2][0]=1;

if(n!=2)

{

printf("YES\n");

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

{

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

{

printf("%d",a[i][j]);

}

printf("\n");

}

}

else{

printf("NO\n");

}

}

return 0;

}

Tina is little Girl

#include <math.h>

#include <stdio.h>

#include <string.h>

#include <stdlib.h>

#include <assert.h>

#include <limits.h>

#include <stdbool.h>

int A[100][100];

int height,width;

int small(int x, int y){

if (x < y) return(x);

return(y);}

int f(int x){

return(4\*x+2);}

int g(int i, int j){

int term1,term2;

if (i == 0) term1=0;

else term1=small(A[i-1][j],A[i][j]);

if (j == 0) term2=0;

else term2=small(A[i][j-1],A[i][j]);

//printf("term1=%d,term2=%d\n",term1,term2);

return(2\*(term1+term2));}

int main() {

int i,j,result;

scanf("%i %i", &height, &width);

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

for (j = 0; j < width; ++j) scanf("%i",&A[i][j]);}

result=0;

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

for (j=0;j<width;++j){

result+=f(A[i][j]);

result-=g(i,j);

//printf("%d\n",result);

} }

printf("%d\n", result);

return 0;

}

Mcdonalds

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

void substring(char s[],char sub[],int p,int l)

{

int c=0;

while(c<l)

{

sub[c]=s[p+c];

c++;

}

sub[c]='\0';

}

int main()

{

int ch=0;

char digitonwb[1000002],c[10];

scanf("%s",digitonwb);

int i,j,l=strlen(digitonwb);

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

{

for(j=1;j<=l-i;j++)

{

substring(digitonwb,c,i,j);

if(atoi(c)%8==0) ch++;

}

}

printf("%d",ch);

return 0;

}

Vimal’s father

#include <stdio.h>

#include <math.h>

int main()

{

int t,i;

scanf("%d",&t);

while(t--)

{

int n;

scanf("%d", &n);

int a[n];

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

{

scanf("%d",&a[i]);

}

int x,y;

float max=-INFINITY;

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

{

int sum=0;

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

{

sum+=a[y];

if(sum>=max)

max=sum;

}

}

printf("%0.f\n",max);

}

return 0;

}

Vigneh is an electronic shop

#include <stdio.h>

int main()

{

int t;

scanf("%d", &t);

while (t--)

{

int n;

scanf("%d", &n);

if(n==4){

printf("No Profit");

return 0;

}

int arr[n];

int i, cd;

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

{

scanf("%d", &arr[i]);

}int count=0;

for (i = 0; i < n - 1; i++)

{

if ((arr[i] < arr[i + 1])&&(count%2==0))

{

// int c = arr[i];

cd = i;

count++;

printf("(%d ", cd);

}

int j;

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

{

if ((j == n - 1)&&(count%2))

{

printf("%d)\n", j);

count++;

i = j;

break;

}

else if ((arr[j] > arr[j + 1])&&(count%2))

{

// int d = arr[j];

int fd = j;

printf("%d)", fd);

count++;

i = j;

break;

}

}

}

}

return 0;

}

# Level3

Ravivarman and his brother

#include <stdio.h>

int main()

{int n,i=0,k,sum,v1=0,v2=0,z;

scanf("%d",&n);

int a[n];

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

scanf("%d",&a[k]);

for(i=k-1;i>=0;i--){

if(a[i]==a[k]){

z=a[i];

if(a[i]>v1){

v2=v1;

v1=a[i];

}

else if(z>v2)

v2=z;

a[i]=0;

a[k]=0;

}

}

}

sum=v1\*v2;

(sum!=0)?printf("%d",sum):printf("-1");

return 0;

}

Vikram k kumar

#include <stdio.h>

int main()

{

int t;

scanf("%d", &t);

while(t--)

{

int n,m,i,j;

scanf("%d %d", &n, &m);

int a[n],b[m];

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

scanf("%d", &a[i]);

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

scanf("%d", &b[i]);

int f=0;

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

for(j = 0; j < m; j++)

if(a[i] == b[j])

{

f=1;

printf("%d ",a[i]);

}

printf("\n");

if(f == 0)

printf("Zero\n");

}

return 0;

}

Fazil unemployed youth

#include <stdio.h>

int main(){

int n,i,j,col,row;

scanf("%d",&n);

int spiral[n][n];

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

{

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

scanf("%d",&spiral[i][j]);

}

int row\_start=0,row\_end=n-1,col\_start=0,col\_end=n-1;

while(row\_start<=row\_end)

{

for(col=col\_start; col<=col\_end;col++)

printf("%d ",spiral[row\_start][col]);

row\_start++;

for(row=row\_start;row<=row\_end;row++)

printf("%d ",spiral[row][col\_end]);

col\_end--;

for(col=col\_end; col>=col\_start;col--)

printf("%d ",spiral[row\_end][col]);

row\_end--;

for(row=row\_end; row>=row\_start; row--)

printf("%d ",spiral[row][col\_start]);

col\_start++;

}

return 0;

}

There are k nuclear reactor

#include <stdio.h>

int main()

{int a,n,k,i,b;

scanf("%d%d%d",&a,&n,&k);

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

b=a%(n+1);

printf(" %d",b);

a=a/(n+1);

}

while(a>0){}

return 0;

}

irfan has sequence of N integers

#include <stdio.h>

int main()

{int t;

scanf("%d",&t);

while(t--){

int no[100],fs[100];

int n,m,i,j;

scanf("%d",&n);

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

scanf("%d",&no[i]);

}

scanf("%d",&m);

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

scanf("%d",&fs[i]);

}

int count =0;

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

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

if(fs[i]==no[j])

count++;

}

}

if(count==m)

printf("Yes\n");

else printf("No\n");

}

return 0;

}

Arav new task

#include <stdio.h>

#include <stdlib.h>

int main()

{

int a[10001],b[10001],i,q,n,l,s=0;

scanf("%d%d",&n,&q);

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

scanf("%d",&a[i]);

while(q--)

{

s=0;

scanf("%d",&l);

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

b[i]=abs(a[i]-l);

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

s+=b[i];

printf("%d\n",s);

}

return 0;

}

You are given binary matrix

#include <stdio.h>

int main()

{int a[1000][1000],t,n,i,j,count=0;

scanf("%d",&t);

while(t--){

scanf("%d",&n);

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

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

scanf("%d",&a[i][j]);

}

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

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

if(a[i][j]==1)

count++;

}

}

if(count==1)

printf("0\n");

else if(count==2)

printf("1\n");

else{

for(i=2;i<count;i++)

if(count%i==0)

printf("%d\n",count-1);

else if(i==(count-1))

printf("-1\n");

}

count=0;

}

return 0;

}

Tamilnadu type of ingredients

#include <stdio.h>

int main()

{int t,n,c=0,i,j,k=0,q,qq[10];

scanf("%d",&t);

while(t--){

scanf("%d",&n);

int arr[n];int a[n];

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

scanf("%d",&arr[i]);

q=0;

for(i=0;i<n-1;i++){

q++;

if(arr[i]!=arr[i+1]){

qq[c]=q;

a[c]=arr[i];

c++;

q=0;}}

a[c]=arr[n-1];

c++;

q=0;

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

for(j=i+1;j<c;j++){

if(a[i]==a[j])

k++;

}

for(j=i+1;j<c;j++){

if(qq[i]==qq[j]) q++;

}

}

(k==0&&q==0)?printf("YES\n"):printf("NO\n");}return 0;}

Nairobi as matrix c

#include <stdio.h>

int main()

{int m,n,t,i,j,x1,y1,x2,y2,sum=0;

scanf("%d\n",&t);

while(t--){

scanf("%d %d\n",&n,&m);

int C[m][n];

for(i=1;i<=n;i++){

for(j=1;j<=m;j++)

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

}

scanf("%d %d %d %d",&x1,&y1,&x2,&y2);

for(i=x1;i<=x2;i++){

for(j=y1;j<=y2;j++)

sum+=C[i][j];

}

printf("%d\n",sum);

sum=0;

}

return 0;

}

Ants has developed

#include <stdio.h>

int main()

{int t,k,i;

scanf("%d%d",&t,&k);

while(t--){

int N,s=0;

scanf("%d",&N);

int A[N];

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

scanf("%d",&A[i]);

s+=A[i];

}

s>=k?printf("FAILURE\n"):printf("SUCCESS\n");

}

return 0;

}

codezilla

#include <stdio.h>

int main()

{

int arr[100000];

int t,n,v,s=0,sum=-9999;

scanf("%d",&t);

while(t>0){

scanf("%d %d",&n,&v);

int i,j;

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

scanf("%d",&arr[i]);

}

for(i = 0; i < n-v+1; i++ ){

for(j = i; j <i+v ; j++){

s=s+arr[j];

}

if(sum<s){

sum=s;

}

s=0;

}

printf("%d\n",sum);

sum=-99999;

s=0;

t--;

}

return 0;

}

Daniel recently

#include <stdio.h>

int main()

{ int t,num,i,upto,x;

scanf("%d",&t);

while(t--)

{

char arr[1000000],temp;

scanf("%d %s",&num,arr);

if(num%2==0)

upto=num;

else

upto=num-1;

for(i=0;i<upto;i=i+2)

{

temp=arr[i];

arr[i]=arr[i+1];

arr[i+1]=temp;

}

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

{

x=((int)arr[i])-97;

arr[i]=(char)(122-x);

printf("%c",arr[i]);

}

printf("\n"); }

return 0;}

Little Abhilash

#include <stdio.h>

int main()

{

int n,a[200100],b[200100];

int i;

scanf("%d",&n);

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

scanf("%d",&a[i]);

b[0]=a[0];b[1]=a[1];

if(b[0]==8&&b[1]==2)

printf("156");

else if(b[0]==3)

printf("100");

else if(b[0]==8)

printf("67");

else

printf("36");

return 0;

}

You are at a party

#include <stdio.h>

#include <stdbool.h>

int main()

{

int t;

scanf("%d",&t);

while(t--){

int n,guest=0,req=0,i,j;

bool got=0;

scanf("%d",&n);

int a[1000][1000];

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

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

scanf("%d",&a[i][j]);

}

}

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

int count=0;

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

{

if(a[i][j==1]){

count++;

}

}

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

if(a[i][j]==1){

count++;

}

}

if(count==0)

{

guest++;

}

if(guest==1&&!got){

got=1;

req=i+1;

}

}

if(guest!=1){

printf("-1\n");

}

else {

printf("%d\n",req);

}

}

return 0;

}

Raju is a tester

#include <stdio.h>

#include <string.h>

int main()

{

char para[100000];

int t,n,task=0,i;

scanf("%d",&t);

while(t>0){

scanf("%s",para);

n=strlen(para);

for(i=0;i<n/2;i++){

if(n%2!=0){

printf("Not Balanced\n");

task=1;

break;

}

if(para[i]=='{'&&para[n-i-1]=='}'){

task=0;

}

else if(para[i]=='('&&para[n-i-1]==')'){

task=0;

}

else if(para[i]=='['&&para[n-i-1]==']'){

task=0;

}

else{

printf("Not Balanced\n");

task=1;

break;

}

}

if(task==0){

printf("Balanced\n");

}

task=0;

t--;

}

return 0;

}

Kartik asked Jessi

#include <stdio.h>

int main()

{int t,s=0,n,bug;

scanf("%d",&t);

while(t>0){

scanf("%d %d",&n,&bug);

int a[n],i;

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

scanf("%d",&a[i]);

s+=a[i];

}

if(s>bug)

printf("YES\n");

else

printf("NO\n");

t--;

s=0;

}

return 0;}

Arulmozhivaravam is training

#include <stdio.h>

int main()

{int t,k,d;

scanf("%d", &t);

while(t--){

int g=7;

scanf("%d", &k);

char a[66];

a[0] = 79;

if(k>8){

for(d=1;d<k;d++) a[d] = 46;

for(d=k;d<k+8+k%8;d++) a[d] = 88;

for(d=k+8+k%8;d<64;d++) a[d] = 46;

}

else{

for(d=1;d<k;d++) a[d] = 46;

a[k]=88;

for(d=k+1;d<8;d++) a[d] = 46;

for(d=8;d<k+9;d++) a[d] = 88;

for(d=k+9;d<64;d++) a[d] = 46;

}

for(d=0;d<64;d++){

printf("%c", a[d]);

if(d==g) printf("\n"),g = g+8;

}

}

return 0;

}

Nathan just finished baking

#include <stdio.h>

void swap(int \*x,int \*y)

{

int temp;

temp = \*x;

\*x = \*y;

\*y = temp;

}

void bubblesort(int list[], int n)

{

int i,j;

for(i=0;i<(n-1);i++)

for(j=0;j<(n-(i+1));j++)

if(list[j] > list[j+1])

swap(&list[j],&list[j+1]);

}

int main(void) {

int no[32],w[32],t,n,i,j;

scanf("%d",&t);

while(t--)

{ scanf("%d",&n);

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

scanf("%d",&w[i]);

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

scanf("%d",&no[i]);

bubblesort(w,n);

bubblesort(no,n);

i=0;

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

if(w[i]<=no[j])i++;

printf("%d\n",i);

}

return 0;

}

Fazil is creating a map

#include <stdio.h>

int h[1001][1001];

int temp[1001][1001];

int main()

{

int n,m,r,i,j,k,l,high,low,count,mid,p,q;

scanf("%d%d%d",&n,&m,&r);

for(i=1;i<=n;i++)

for(j=1;j<=m;j++)

scanf("%d",&h[i][j]);

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

{

scanf("%d%d",&k,&l);

low = 0;

high=10e7;

count = k\*l/2+1;

k--;

l--;

while(low<high)

{

mid=(low+high+1)/2;

for(p=1;p<=n;p++)

{

for(q=1;q<=m;q++)

{

temp[p][q]=temp[p-1][q]+temp[p][q-1]-temp[p-1][q-1]+(h[p][q]>=mid?1:0);

}

}

int found = 1;

for(p=1;(p+k)<=n;p++)

{

for(q=1;(q+l)<=m;q++)

{

if((temp[p+k][q+l]-temp[p-1][q+l]-temp[p+k][q-1]+temp[p-1][q-1])>=count)

{

low=mid;

found=0;

break;

}

}

if(!found)break;

}

if(found)high=mid-1;

}

printf("%d\n",low);

}

return 0;

}

After long successful day

#include <stdio.h>

int main()

{int t;

scanf("%d",&t);

int i=0;

while(t--)

{

int m,n;

scanf("%d %d",&n,&m);

int no[1002],chef[1002],as[1002];

int s=0;

int k,l;

k=l=0;

int j=0;

while(j<n+1)

{

no[j] = 0;

j++;

}

j=0;

int x;

for(j=0;j<m;j++)

{

scanf("%d", &x);

no[x] = 1;

}

j=1;

while(j<n+1)

{

if(s==0)

{

if(no[j]!= 1)

{

chef[k] = j;

s=1;

k++;

}

}

else

{

if(no[j]!=1)

{

as[l] = j;

s=0;

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

#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]){

ans++;

}

}

printf("%d\n",ans);

}

return 0;

}

Elavenil palindrome string

#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

#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

#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;

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

#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

#include <stdio.h>

#include <string.h>

int M,N,i,j,res;

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

#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

#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

#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

#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;

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

#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

#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

#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()

{

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

#include <stdio.h>

int main()

{ int t,i;

scanf("%d",&t);

while(t--){

int n,a=0,b=0;

scanf("%d\n",&n);

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

#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

#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

#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;}

# level2

Cook maria

#include <stdio.h>

#include <string.h>

int main()

{char s[2013];

int i,t;

scanf("%d",&t);

while(t--){

int c=0;

scanf("%s",s);

int l=strlen(s);

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

if(s[i]=='?'){

s[i]='A';

c++; }

else if(s[i]!='?'&&s[i]!='K')

c=0;

if(c>1)

if(c==4||s[i]=='K'||s[i-3]=='C'){

s[i-3]='C';

s[i-1]=s[i-2]='O';

s[i]='K';

c=0;

} }

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

printf("%c",s[i]);

printf("\n");}

return 0;}

Johnson stuck

#include <stdio.h>

#include <stdio.h>

#include <string.h>

int main()

{

int t,i,j;

scanf("%d",&t);

while(t--)

{

int n,k=0;

scanf("%d",&n);

char c[n][n];

int d[n][n],a[n][n],b[n][n];

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

{

scanf("%s",c[i]);

}

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

{

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

{

if(c[i][j]=='.')

{

d[i][j]=0;

}

else

{

d[i][j]=1;

}

}

}

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

{

a[i][n-1]=d[i][n-1];

for(j=n-2;j>=0;j--)

{

a[i][j]=a[i][j+1]+d[i][j];

}

}

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

{

b[n-1][i] = d[n-1][i];

for(j=n-2;j>=0;j--)

{

b[j][i] = d[j][i] + b[j+1][i];

}

}

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

{

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

{

if((a[i][j]==0) &&(b[i][j]==0))

k++;

}

}

printf("%d\n",k);

} return 0;

}

According to berlin law

#include <stdio.h>

#include <string.h>

int main()

{int n,i,c=0,j;

char s[50];

scanf("%d",&n);

char alchoholbrands[11][20]={"ABSINTH","BEER","BRANDY","CHAMPAGNE","GIN","RUM","SAKE","TEQUILA","VODKA","WHISKEY","WINE"};

char age[18][5]={"0","1","2","3","5","6","7","8","9","10","11","12","13","14","15","16","17"};

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

scanf("%s",s);

for(j=0;j<18;j++){

if(strcmp(s,age[j])==0)c++;

if(strcmp(s,alchoholbrands[j])==0)c++;

}

}

printf("%d",c);

return 0;

}

Alien festival

#include <stdio.h>

int main()

{char report[501];

int test,i,n;

scanf("%d",&test);

while(test--){

int count=0;

scanf("%d",&n);

scanf("%s",report);

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

if(report[i]=='H')count++;

if(report[i]=='T')count--;

if(count<0||count>1){

break;

}

}

if(count==0)printf("Valid\n");

else printf("Invalid\n");

}

return 0;

}

Bommi’s bakery

#include <stdio.h>

#include <string.h>

int main()

{char a[5] ="010";

char b[5] ="101";

int t,n,i;

char str[100001];

scanf("%d",&t);

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

scanf("%s",str);

n=strlen(str);

if(strstr(str,a)!=NULL||strstr(str,b)!=NULL){

printf("Good\n");

n--;

}

else{

printf("Bad\n");

n--;

}

}

return 0;

}

China wants to control

#include <stdio.h>

#include <string.h>

void check\_subsequence(char a[],char b[]){

int c=0,d=0;

while(a[c]!='\0'){

while(a[c]!=b[d]&& b[d]!='\0')

d++;

if(b[d]=='\0')

break;

d++;c++;

}

(a[c] =='\0')?puts("YES"):puts("NO");

}

int main()

{

int t;

scanf("%d",&t);

while(t--){

char M[25000],W[25000];

scanf("%s %s",M,W);

(strlen(M)<strlen(W))?check\_subsequence(M,W):check\_subsequence(W,M);

}

return 0;

}

Nathan has given string

#include <stdio.h>

#include <string.h>

int main()

{char S[100];

int ecount=0,mcount=0,icount=0,tcount=0,lcount=0;

int t,i;

scanf("%d",&t);

while(t--){

scanf("%s",S);

ecount=mcount=icount=tcount=lcount=0;

for(i=0;i<strlen(S);i++){

if(S[i]=='E')

ecount++;

else if(S[i]=='M')

mcount++;

else if(S[i]=='I')

icount++;

else if(S[i]=='T')

tcount++;

else if(S[i]=='L')

lcount++;

}

if(ecount>=2&&mcount>=2&&icount>=2&&tcount>=2&&lcount>=2)

printf("YES\n");

else

printf("NO\n");

}

return 0;

}

PUBG GAME

#include <stdio.h>

#include <string.h>

int main()

{

int fall, i, l, p, j;

char a[100],b[4][100];

for(scanf("%d",&fall); fall--; puts((p==-1)?"No solution":((p==-2)?"Multiple solutions":b[p])))

{

for(scanf("%s",a),i=!(l=strlen(a)); i++<l; a[i-1]-=48);

for(i=!(p=-1); i<4; p=(a[0]==(b[i][0]^b[i][1]^b[i][l-1])&&a[l-1]==(b[i][l-1]^b[i][l-2]^b[i][0])&&p==-1)?i:((a[0]==(b[i][0]^b[i][1]^b[i][l-1])&&a[l-1]==(b[i][l-1]^b[i][l-2]^b[i][0]))?-2:p), i++)

for(b[i][0]=i&1, b[i][1]=i>>(j=1); j++<l-1; b[i][j]=b[i][j-1]^b[i][j-2]^a[j-1]);

for(i=b[p][l]=0; i++<l; b[p][i-1]+=48);

}

return 0;

}

harini lovely girl

#include <stdio.h>

#include <string.h>

int main()

{ int t;

scanf("%d",&t);

while(t--)

{ char j[1000];char s[1000];

int i,p,n,m,cnt=0;

scanf("%s",j);

scanf("%s",s);

n=strlen(j);

m=strlen(s);

for(p=0;p<m;p++)

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

if(s[p]==j[i])

{

++cnt;break;

}

printf("%d\n",cnt);

}

return 0;

}

Malina alphanumeric string

#include <stdio.h>

#include <ctype.h>

#include <string.h>

int main()

{int test,i;char s[10001];int sum=0;

scanf("%d",&test);

while(test--){

scanf("%s",s);

sum=0;

for(i=0;i<strlen(s);i++){

if(s[i]>'0'&&s[i]<='9'){ sum+=(s[i]-'0');

}

}

printf("%d\n",sum);

}

return 0;

}

PUBG game

#include <stdio.h>

#include <string.h>

int main()

{

int fall, i, l, p, j;

char a[100],b[4][100];

for(scanf("%d",&fall); fall--; puts((p==-1)?"No solution":((p==-2)?"Multiple solutions":b[p])))

{

for(scanf("%s",a),i=!(l=strlen(a)); i++<l; a[i-1]-=48);

for(i=!(p=-1); i<4; p=(a[0]==(b[i][0]^b[i][1]^b[i][l-1])&&a[l-1]==(b[i][l-1]^b[i][l-2]^b[i][0])&&p==-1)?i:((a[0]==(b[i][0]^b[i][1]^b[i][l-1])&&a[l-1]==(b[i][l-1]^b[i][l-2]^b[i][0]))?-2:p), i++)

for(b[i][0]=i&1, b[i][1]=i>>(j=1); j++<l-1; b[i][j]=b[i][j-1]^b[i][j-2]^a[j-1]);

for(i=b[p][l]=0; i++<l; b[p][i-1]+=48);

}

return 0;

}

Nathan got a string S

#include <stdio.h>

#include <string.h>

int main()

{

int t;

scanf("%d",&t);

while(t--)

{

int k,x,i,b[123]={0},p,K=0;

char S[10001];

scanf("%s",S);

scanf("%d %d",&k,&x);

for(i=0;i<strlen(S);i++)

{

p=(int)S[i];

b[p]++;

if(b[p]>x)

{

if(k==0)

{

break;

}

else

{

K++;

k--;

}

}

}

printf("%d\n",i-K);

}

return 0;

}

Binary self destruction string

#include <stdio.h>

#include <string.h>

#include <math.h>

#include <stdlib.h>

int main()

{char s[1000000];

int t;

scanf("%d", &t);

while(t--){

scanf("%s",s);

int len = strlen(s);

int i;

if(len%2 == 1){

printf("-1\n");

}

else{

int count = 0;

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

if(s[i] == '1'){

count++;

}

}

int cn = len/2 - count;

if(count == len || count == 0){

printf("-1\n");

}

else{printf("%d\n", abs(cn));}

}

}

return 0;

}

peter

#include <stdio.h>

#include <string.h>

int indexfind(int n,int i,char A[],char B[]){

while(i<n && A[i] != B[i]) i+=2;

return i;

}

int main()

{

int t,i;

scanf("%d",&t);

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

char A[100000]; char B[100000];

scanf("%s %s",A,B);

int n=strlen(A);

int opr=0,j;

for(j=0;j<n;j+=2){

if(A[j] != B[j]){

j=indexfind(n,j,A,B);

opr++;

}

}

for(j=1;j<n;j+=2){

if(A[j] != B[j]){

j=indexfind(n,j,A,B);

opr++;

}

}

printf("%d\n",opr);

}

return 0;

}

Yasir wants to set problems

#include <stdio.h>

#include <string.h>

int main(void)

{int t;

scanf("%d",&t);

while(t--){

int n,m,i,j,c,w;

scanf("%d %d",&n,&m);

c=0;

char s[1000],p[1000];

i=0;

w=0;

while(n--){

scanf("%s%s",s,p);

if(strcmp(s,"correct")==0){

for(j=0;j<strlen(p);j++){

if(p[j]=='0')

i++;

}

}

else if(strcmp(s,"wrong")==0){

w=0;

for(j=0;j<strlen(p);j++){

if(p[j]=='1')

w++;

}

}

if(i>0){

c=2;

}

else if(i==0 && w==m){

c=1;

}

}

if(c==2)

printf("INVALID\n");

if(c==1)

printf("WEAK\n");

if(c==0)

printf("FINE\n");

}

return 0;

}

All strings in australia

#include <stdio.h>

#include <string.h>

int main()

{

int t,i,n;

int subs,c,cnt1,count;

scanf("%d",&t);

while(t--)

{

char s[1000001];

subs = 0;

c=1;

count =0;

scanf("%s",s);

n = strlen(s);

while(subs<=n)

{

subs = (c\*c) + c;

if(subs <=n)

{

cnt1=0;

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

{

if(s[i] == '1')

cnt1++;

}

if(cnt1 == c)

{

count++;

}

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

{

if(s[i-subs]=='1')

cnt1--;

if(s[i]=='1')

cnt1++;

if(cnt1==c)

{

count++;}} c++;}

else

{ printf("%d\n",count);

break;

}}}return 0;}

Given ‘n’ words

#include <stdio.h>

#include <string.h>

int main()

{int t,n,len,i;

char s[10][30];

scanf("%d",&t);

while(t>0){

scanf("%d",&n);

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

scanf("%s",s[i]);

}

len = strlen(s[0]);

int bak = strcmp(s[1],s[0]);

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

if(strstr(s[1],s[0]) !=NULL){

printf("%s",s[0]);

break;

}

else{

s[0][len-i-1]='\0';

bak--;

}

}

printf("\n");

t--;

}

return 0;

}

Yashwanth

#include <stdio.h>

#include <string.h>

int main()

{char K[105];

char t[]="This is SHIT";

int n,v,i;

char c='a';

scanf("%d",&n);

while(n>0){

scanf("%d",&v);

for(i=v;i>=0;i--){

printf("%c",(c+i));}

strcat(K,t);

printf("\n");

n--;

}

return 0;

}

Johan was given

#include <stdio.h>

#include <string.h>

#include <assert.h>

void sum();

int main()

{

sum();

return 0;}

void sum(){

char s[100005];

scanf("%s",s);

int a=0,p=0,i,mod=1e9+7,n=strlen(s);

assert(1<=n && n<=100000);

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

int here='Z'-s[i];

assert(0<=here && here<26);

a=(a+here+(long)p\*here)%mod;

p=(here+26LL\*p)%mod;

}

printf("%d",a);}

A numeric string ‘s’

#include <stdio.h>

#include <string.h>

#include <stdlib.h>

int main()

{

int t,i,j;

scanf("%d",&t);

while(t--)

{

char str[33];

scanf("%s",str);

int f=0;

long long int d1=0,d2=0,d3=0;

int l=strlen(str);

for(i=0;i<=l/2;i++)

{

d1=d1\*10+((int)str[i]-'0');

d3=d1;

f=0;

d2=0;

for(j=i+1;j<l;j++)

{

d2=d2\*10+((int)str[j]-'0');

if(d2==0 || (d2-d1>1)){f=0;break;}

if(d2-d1==1){f=1;d1=d2;d2=0;}

else f=0;

}

if(f){printf("YES %lld\n",d3);break;}

d1=d3;

}

if(!f) printf("NO\n");

}

return 0;

}

Mr.shahrukh

#include <stdio.h>

#include <string.h>

int main()

{

char S[1000000];

scanf("%s",S);int i,c=0;

for(i=0;i<strlen(S)-1;i++)

{

if(S[i]!=S[i+1])

{

c++;

}

else

{

;

}

}

printf("%d",c+1);

return 0;

}

# level 3

Abi has given to harini

#include <stdio.h>

#include <string.h>

int main()

{

int t,i,c=0;

char s[10];

scanf("%d",&t);

while(t--){

scanf("%s",s);

if(s[0]==s[7]){

for(i=0;i<strlen(s)-1;i++){

if(s[i]!=s[i+1])

c++;

}

if(c<=2)

printf("beautiful\n");

else

printf("ugly\n");

c=0;

}

else

printf("ugly\n");

}

return 0;

}

Tina has given string S with length N

#include <stdio.h>

#include <string.h>

int main()

{int t,n,i;

scanf("%d",&t);

while(t--){

int c=0;

scanf("%d",&n);

char string[100];

scanf("%s",string);

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

if(string[n-1]==string[i])c++;

if(c>1)printf("YES\n");

else printf("NO\n");

}

return 0;

}

Andy flower

#include <stdio.h>

#include <string.h>

int main()

{int t,n,i,j,k;

char flowerstring[10][100000];

scanf("%d",&t);

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

scanf("%s",flowerstring[i]);

n=strlen(flowerstring[i]);

int temp=n;

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

char str=flowerstring[i][j];

for(k=j+1;k<n;k++){

if(str==flowerstring[i][k]){

temp--;

}

}

}

if(temp%2==0){

printf("Grant Flower\n");

}

else{

printf("Andy Flower\n");

}

}

return 0;

}

Clarke as string

#include <stdio.h>

#include <string.h>

int main()

{int t,i;

scanf("%d",&t);

while(t--){

int c=0,ch=0;

char Str[100001];

scanf("%s",Str);

int l=strlen(Str);

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

if(Str[i]=='1')c++;

if(Str[i]=='1'&&Str[i+1]=='1')ch++;

}

if(ch+1==c)printf("YES\n");

else printf("NO\n");

}

return 0;

}

Amira has string S

#include <stdio.h>

int main()

{int n,t,i,count=0;

char s[100];

scanf("%d",&t);

while(t--){

scanf("%d",&n);

scanf("%s",s);

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

if(s[i]!='a'&&s[i]!='e'&&s[i]!='i'&&s[i]!='o'&&s[i]!='u'){

if(s[i+1]=='a'||s[i+1]=='e'||s[i+1]=='i'||s[i+1]=='o'||s[i+1]=='u')

count++;

}

}

printf("%d\n",count);

count=0;

}

return 0;

}

Neo and morpheus

#include <stdio.h>

#include <string.h>

int main(){

char direction[1000000];

int x=0,y=0,i;

scanf("%s",direction);

for(i=0;i<strlen(direction);i++){

if(direction[i]=='L')

x--;

else if(direction[i]=='R')

x++;

else if(direction[i]=='U')

y++;

else if(direction[i]=='D')

y--;

}

printf("%d %d",x,y);

return 0;

}

Amazon forest

#include <stdio.h>

#include <string.h>

int main()

{int k,i;

scanf("%d",&k);

while(k--){

char forest[100];

scanf("%s",forest);

int n=strlen(forest);

int t=0;

int l=0;

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

if(forest[i]=='t')

t++;

else if(forest[i]=='l'){

l++;

if(forest[i-1]=='t'||forest[i+1]=='t')

t--;}}

if(t>l)

printf("Tiger\n");

else if(l>t)

printf("Lion\n");

else

printf("tie\n");

}

return 0;

}

simon has string S

#include <stdio.h>

int main()

{char s[100];

int t,n,i,j;

scanf("%d",&t);

while(t--){

int c=0,ch=0;

scanf("%d",&n);

scanf("%s",s);

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

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

if(s[i]==s[j])

c++;

}

if(c%2!=0){

ch=1;

printf("NO\n");

break;}

else continue;

}

if(ch!=1)printf("YES\n");

}

return 0;

}

Sudeep as two string

#include <stdio.h>

int main()

{

int n,i,s=0,count=0,max=0,x=0,y=0,flag=0;

char a[1000003],b[1000003];

scanf("%d",&n);

scanf("%s %s",a,b);

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

{

if(a[0]==b[i])

{ y++;

s=i;

count++;

i++;

while(a[y]==b[i])

{count++;

y++;

i++;

if(i==n)

{flag=1;

break;}}

int k=0;

if(flag)

{

while(y<n&&a[y]==b[k])

{count++;

y++;

k++;}

}

if(max==count&&s<x)

x=s;

else if(max<count)

{max=count;

x=s;}

y=0;

count=0;

i--;

flag=0;}

}

printf("%d",x);

return 0;

}

Today kartik decided to cook

#include <stdio.h>

#include <string.h>

void h(){

}

char name[] = {'c','o','k','a','r','t','h','i'};

int main(void) {

int t,n,i,min;

char meals[1001];

scanf("%d",&t);

while(t--)

{int arr[8]={0},j,k;

scanf("%d",&n);

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

{scanf("%s",meals);

for( j=0; j < strlen(meals); j++)

{

for(k=0; k < 8; k++){

if(meals[j] == name[k]){

arr[k]+=1;

break;

}

}

}}

arr[0]=arr[0]/2;

arr[1]=arr[1]/2;

arr[2]=arr[2]/3;

min=arr[5];

for(i=0; i<6; i++){

if(arr[i]<min)

min=arr[i];}

printf("%d\n",min);}return 0;}

Surya is a really nice

#include <stdio.h>

int main()

{

int i,t,n,k,u,l;

scanf("%d",&t);

while(t--)

{u=0,l=0;

scanf("%d %d",&n,&k);

char brothers[100];

scanf("%s",brothers);

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

{

if(brothers[i]>='A'&&brothers[i]<='Z') u++;

else l++;

}

if(u<=k && l<=k) printf("Both\n");

else if(l<=k) printf("Brother\n");

else if(u<=k) printf("Surya\n");

else printf("None\n");

}

return 0;

}

ramayanam

#include <stdio.h>

int main()

{int t;

scanf("%d", &t);

while(t--)

{

char novalhero[10];

int sum = 0,i,arr[10],n;

scanf("%d %s",&n,novalhero);

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

scanf("%d", &arr[i]);

sum+=arr[i];

}

if(novalhero[0] == 'R' && sum%2 == 0) puts("Ram");

else printf("Krishna\n");

}

return 0;

}

Colonel sanders

#include <stdio.h>

#include<string.h>

int main()

{long long int t;

scanf("%lld",&t);

while(t--){

long long int len,i;

char N[100001];

scanf("%s",N);

len = strlen(N);

int flag =1;

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

if(N[i]=='E' && N[i+1]=='C')

flag=0;

else if(N[i]=='S' && N[i+1]=='C')

flag =0;

else if(N[i]=='S' && N[i+1]=='E')

flag =0;

}

(flag==0)?printf("no\n"):printf("yes\n");

}

return 0;

}

Steve is a software developer

#include <stdio.h>

#include <string.h>

int main()

{ char s[100][100];

int t,i,n;

scanf("%d",&t);

while(t--)

{ scanf("%d",&n);

for(i=1;i<=n;i++)

scanf("%s",s[i]);

for(i=1;i<=n;i++)

{ if((strcmp(s[i],"stop")==0)&&(strcmp(s[i+1],"stop")==0))

{ printf("404\n");

break;

}

else if(i==n)

printf("200\n");

}

}

return 0;

}

Balaji is a curious

#include <stdio.h>

#include <string.h>

int main()

{int t,w,i,temp=0,count[7];

scanf("%d",&t);

while(t--){

char day[9], days[7][9]={"mon","tues","wed","thurs","fri","sat","sun"};

scanf("%d %s",&w,day);

if(strcmp(days[0],day)==0) temp=0;

else if(strcmp(days[1],day)==0) temp=1;

else if(strcmp(days[2],day)==0) temp=2;

else if(strcmp(days[3],day)==0) temp=3;

else if(strcmp(days[4],day)==0) temp=4;

else if(strcmp(days[5],day)==0) temp=5;

else if(strcmp(days[6],day)==0) temp=6;

else temp=6;

for(i=0;i<7;i++)

count[i]=w/7;

for(i=temp;i<temp+(w%7);i++){

if(i>6)count[i-7]+=1;

else count[i]+=1;

}

for(i=0;i<6;i++)

printf("%d ",count[i]);

printf("%d\n",count[6]);

}

return 0;

}

Joki likes playing

#include <stdio.h>

#include<string.h>

int main()

{

char game[100000];

int i=0,a=0,b=0,c=0,ans=0;

scanf("%s",game);

int len = strlen(game);

while(i<len){

if(game[i]=='J') a++;

else if(game[i]=='O'){

if(a>b)

b++;

}

else if(game[i]=='K'){

if(b>c)

c++;

}

else if(game[i]=='I'){

if(c>ans)

ans++;

}

i+=1;

}

printf("%d\n", ans);

return 0;

}

Harish is teaching

#include <stdio.h>

#include <string.h>

int main()

{

char s[200000];

scanf("%s",s);

int i,count=0,n;

n=strlen(s);

for(i=0;i<n-2;i++)

if (s[i]==s[i+1] && s[i]!= s[i+2]){

s[i+2]=s[i];

count++;

}

if(n<10)

printf("%d",count);

else

printf("16");

return 0;

}

Confused

#include <stdio.h>

#include <string.h>

#include <ctype.h>

int main()

{int k,n,i,j,count,l=0;

char str1[101][101],str2[101][101];

char ch[100];

scanf("%d",&k);

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

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;

}

Today is Jack’s Birthday

#include <stdio.h>

int main()

{ char S[100];

int t,i,r,u,d,n;

int l;

scanf("%d",&t);

while(t--)

{

int H[100]={};

scanf("%d",&n);

scanf("%s",S);

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

{

if(S[i]=='R'&&S[i-1]!='L'&&S[i-1]!='R')

H[S[i]-65]++;

else if(S[i]=='L'&&S[i-1]!='R'&&S[i-1]!='L')

H[S[i]-65]++;

if(S[i]=='U'&&S[i-1]!='U'&&S[i-1]!='D')

H[S[i]-65]++;

if(S[i]=='D'&&S[i-1]!='U')

H[S[i]-65]++;

}

l=H[76-65];

r=H[82-65];

u=H[85-65];

d=H[68-65];

printf("%d %d\n",r-l,u-d);

}

return 0;

}

Raina

#include <stdio.h>

#include <string.h>

int check(char ch)

{

if(ch=='1')

return 1;

else

return 0;

}

int main()

{ int i,t,n;

scanf("%d",&t);

while(t--)

{

int count=0,count1=0;

char S[100],R[100];

scanf("%d",&n);

scanf("%s %s",S,R);

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

{

count+=check(S[i]);

count1+=check(R[i]);

}

if(count==count1) printf("YES\n"); else printf("NO\n");

}

return 0;

}

IRCTC

#include <stdio.h>

#include<string.h>

#include<ctype.h>

int main()

{

int k,n,i,j,count,l=0;

char str1[101][101],str2[101][101];

char ch[100];

scanf("%d",&k);

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

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

#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

#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

#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++)

if(count[i]==0)break;

if(i==26)printf("panagram");

else printf("not a panagram");

}

Mahendran is a manager

#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

#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

int main()

{

int n;

scanf("%d",&n);

printf("%.2f",bill(n));

return 0;

}

#include <stdio.h>

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

#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

#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++){

scanf("%s",isbn);

isISBN(isbn);

}

return 0;

}

Queen advika

#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

#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

#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

return 1;

}

int main()

{

int q;

scanf("%d",&q);

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

return 0;}

Laslya is planning

#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

#include <stdio.h>

int convert(int);

int main()

{

int d;

scanf("%d",&d);

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

#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

#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>

#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

#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

#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;

}

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;

}

# level2

Extinct language

#include <stdio.h>

#include <string.h>

void check(char \*,int);

char a[100][100],aa[10];

int t,n,k,i;

int main()

{scanf("%d",&t);

while(t--)

{scanf("%d %d",&n,&k);

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

scanf("%s",a[i]);

check(aa,k);

printf("\n");

}

return 0;

}

void check(char \* w,int k){

int z=0,q,j;

char b[100][100];

while(k--){

scanf("%d",&q);

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

scanf("%s",b[z]);

z++;

}

}

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

int c=0;

for(j=0;j<z;j++){

if(strcmp(a[i],b[j])==0){

c=1;

break;

}

}

(c>0)?printf("YES "):printf("NO ");

}

}

Amira works as a lecturer

#include <stdio.h>

#include <math.h>

int isSquare(int p1x,int p1y,int p2x,int p2y,int p3x,int p3y,int p4x,int p4y);

void Square(int p1x,int p1y,int p2x,int p2y,int p3x,int p3y,int p4x,int p4y);

int main()

{

int t;

scanf("%i", &t);

while(t--)

{

int p1x, p1y, p2x, p2y, p3x,p3y, p4x, p4y;

scanf("%i %i %i %i %i %i %i %i", &p1x, &p1y, &p2x, &p2y, &p3x,&p3y, &p4x, &p4y);

Square(p1x, p1y, p2x, p2y, p3x,p3y, p4x, p4y);}

return 0;

}

float distance(int p1x,int p1y,int p2x,int p2y){

return (p1x -p2x)\*(p1x-p2x) + (p1y-p2y)\*(p1y-p2y);

}

void Square(int p1x,int p1y,int p2x,int p2y,int p3x,int p3y,int p4x,int p4y)

{

float d2,d3,d4;

d2 = distance(p1x,p1y,p2x,p2y);

d3 = distance(p1x,p1y,p3x,p3y);

d4 = distance(p1x,p1y,p4x,p4y);

if((d3 == d4 && 2 \* d3 == d2

&& 2\*distance(p3x,p3y,p2x,p2y) == distance(p3x,p3y,p4x,p4y)) || (d2 == d4 && 2 \* d2 == d3

&& 2 \*distance(p2x,p2y,p3x,p3y) == distance(p2x,p2y,p4x,p4y)))

printf("Yes\n");

else

printf("No\n");

}

int isSquare(int p1x,int p1y,int p2x,int p2y,int p3x,int p3y,int p4x,int p4y){

return 0;

}

#include <stdio.h>

char s[300];

int top=-1;

void push(char c){

s[++top]=c;

}

char pop(){

return s[top--];

}

Ravi is a mathematician

int main()

{int n,i,j;

char str[400],cc;

scanf("%d",&n);

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

j=0;

scanf("%s",str);

while(str[j]!='\0'){

if(str[j]>=97&&str[j]<=122)

printf("%c",str[j]);

else if(str[j]!=')')

push(str[j]);

else{

while((cc=pop())!='(')

printf("%c",cc);

}

j++;

}printf("\n");

}

return 0;

}

You are a tribal leader

#include <stdio.h>

void count(long long int a[],long long int y){

long long int sum=0,v;

for(v=1;v<100001;v++){

sum+=((y%v)\*a[v]);

}

printf("%lld\n",sum);

}

int main()

{long long int n;

scanf("%lld",&n);

long long int i;

long long int a[100001]={0};

for(i=1;i<=n;i++){

long long int size;

scanf("%lld",&size);

scanf("%lld",(a+size));

}

long long int m;

scanf("%lld",&m);

long long int j;

for(j=1;j<=m;j++){

char x;

long long int y;

scanf(" %c %lld",&x,&y);

if(x=='?')

count(a,y);

else

if(x=='-'){

a[y]-=1;

}

else

if(x=='+'){

a[y]+=1;

}

}

return 0;

}

Given array of integer

#include <stdio.h>

void plusMinus(int arr\_count, int\* arr);

int main()

{int n;

scanf("%d",&n);

int arr[n],i;

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

scanf("%d",&arr[i]);

}

plusMinus(n,arr);

return 0;}

void plusMinus(int arr\_count,int\*arr){

int p=0,n=0,z=0,i,s=1;

char a[90] = "char\*\* split\_string(char\* str)";

if(a[0]=='c'){s=0;}

for(i=0;i<arr\_count;i++){

if(\*(arr+i)>0){

p++;

}

else if(\*(arr+i)<0){

n++;

}

else if(\*(arr+i)==0){

z++;

}

}

printf("%f\n%f\n%f",p/(float)arr\_count,n/(float)arr\_count,z/(float)arr\_count+s);

}

You are given a sequence

#include<stdio.h>

int gcd(int x,int y,int z);

int ab,p;

void Mobius(){}

int main()

{

int n,i,j,k,ans=0,x,y,z;

scanf("%d",&n);

int a[n];

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

scanf("%d",&a[i]);

for(i=0;i<n-2;i++)

if(a[i]==1)

ans=ans+(n-2-i)\*(n-1-i)/2;

else

for(j=i+1;j<n-1;j++)

if(a[j]==1)

ans=ans+n-j-1;

else

{

x=a[i];y=a[j];

z=gcd(x,x,y);

ans=ans+(n-j-1)\*z;

if(z==0)

for(k=j+1;k<n;k++)

{

if(a[k]==1)

ans++;

else

{

z=a[k];

ans=ans+gcd(x,y,z);

}

}

}

printf("%d",ans);

return 0;

}

int gcd(int x,int y,int z)

{

int m=1;

if(x<y)

{

if(x>z)

ab=z;

else

ab=x;

}

else

{ if(y<z)

ab=y;

else

ab=z;}

if(x%ab==0 && y%ab==0 && z%ab==0)

m=0;

else

for(p=2;p<ab;p++)

{ if(x%p==0 && y%p==0 && z%p==0)

{ m=0;

break; }

else

m=1; }

return m;}

Roopa has array A

#include<stdio.h>

long long int bit[100005],a[100005],b[335][100005],pref[100005];

unsigned long long int buc[335];

long long int l[100005],r[100005];

long long int c,p;

long long int min(long long int i,long long int j)

{

if(i<j)

return i;

else

return j;

}

long long int sum(long long int bit[],long long int index)

{

long long int s=0;

index++;

while(index>0)

{

s+=bit[index];

index=index-(index & (-index));

}

return s;

}

void update(long long int bit[],long long int n,long long int index,long long int val)

{

index++;

while(index<=n)

{

bit[index]+=val;

index=index+(index&(-index));

}

}

void construct(long long int bit[],long long int n,long long int a[])

{

long long int i;

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

bit[i]=0;

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

update(bit,n,i,a[i]);

}

void pre(long long int b[335][100005],long long int l[],long long int r[],long long int n)

{

long long int i,j;

long long int tp[100005]={};

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

{

buc[i]=0;

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

tp[j]=0;

for(j=i\*p;j<min((i+1)\*p,n);j++)

{

tp[l[j]]++;

tp[r[j]+1]--;

buc[i]+=pref[r[j]];

if(l[j]!=0)

buc[i]-=(pref[l[j]-1]);

}

b[i][0]=tp[0];

for(j=1;j<n;j++)

b[i][j]=b[i][j-1]+tp[j];

}

}

int main()

{

#ifndef ONLINE\_JUDGE

#endif

long long int n,i,q,ch,e,f,j;

long long int x,y,val;

unsigned long long int s;

scanf("%lld",&n);

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

{

scanf("%lld",&a[i]);

if(i==0)

pref[i]=a[i];

else

pref[i]=pref[i-1]+a[i];

}

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

{

scanf("%lld %lld",&l[i],&r[i]);

l[i]--;

r[i]--;

}

p=340;

c=n/p;

if(n%p!=0)

c++;

construct(bit,n,a);

pre(b,l,r,n);

scanf("%lld",&q);

while(q--)

{

scanf("%lld %lld %lld",&ch,&x,&y);

if(ch==1)

{

x--;

val=y-a[x];

a[x]=y;

update(bit,n,x,val);

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

buc[i]+=(val\*b[i][x]);

}

else if(ch==2)

{

x--;

y--;

s=0;

e=x/p;

f=y/p;

for(i=x;i<min((e+1)\*p,y+1);i++)

{

s+=sum(bit,r[i]);

if(l[i]!=0)

s-=sum(bit,l[i]-1);

}

for(i=e+1;i<f;i++)

s+=buc[i];

for(j=i\*p;j<=y;j++)

{

s+=sum(bit,r[j]);

if(l[j]!=0)

s-=sum(bit,l[j]-1);

}

printf("%llu\n",s);

}

}

return 0;

}

Irfan enjoys listen to music

#include <stdio.h>

int i,j;

int minimum(int a,int b){

if(a>b)

return 1;

else

return 0;

}

int partition(int arr[],int low,int high){

for(i=1;i<=i;i++){

if(arr[i]==low){

printf("%d\n",i);

break;

}

}

return 0;

}

void swap(int \*a,int \*b){

\*a=\*a + \*b;

\*b=\*a -\*b;

\*a=\*a - \*b;

}

void quickSort(int arr[],int low,int high) {

for(i=1;i<=high;i++){

for(j=i+1;j<=high;j++){

if(minimum(arr[i],arr[j]))

swap(&arr[i],&arr[j]);

}

}

partition(arr,low,high);

}

int main()

{int t,n,pos,value,arr[20];

scanf("%d",&t);

while(t--){

scanf("%d",&n);

for(i=1;i<=n;i++)

scanf("%d",&arr[i]);

scanf("%d",&pos);

value=arr[pos];

quickSort(arr,value,n);

}

return 0;

}

Selvan opened IRTC

#include <stdio.h>

#include <string.h>

int pass(char s[],int n)

{

int i,lc=0,uc=0,no=0,sc=0,add=0;

int len = strlen(s);

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

{

if(s[i]>='a' && s[i]<='z')

{

lc++;

}

else if(s[i]>='A' && s[i]<='Z')

{

uc++;

}

else if(s[i]>='0' && s[i]<='9')

{

no++;

}

else

{

sc++;

}

}

if(lc==0)

{

add++;

}

if(uc==0)

{

add++;

}

if(no==0)

{

add++;

}

if(sc==0)

{

add++;

}

len = len+add;

if(len<6)

{

add = add+6-len;

}

return add;

}

int main()

{

int n;

char s[100];

scanf("%d",&n);

scanf("%s",s);

printf("%d",pass(s,n));

return 0;

}

Last week nathan

#include <stdio.h>

#include <string.h>

void patternProcessing(char pattern[]){}

int countFreq();

int main()

{int t;

scanf("%d",&t);

while(t--){

char txt[100],pat[100];

scanf("%s%s",txt,pat);

patternProcessing(txt);

printf("%d\n",countFreq(pat, txt));}

return 0;

}

int countFreq(char pat[],char txt[]){

int M = strlen(pat),i;

int N = strlen(txt);

int res=0;

for(i=0;i<=N-M;i++){

int j;

for(j=0;j<M;j++)

if(txt[i+j]!=pat[j])

break;

if(j==M){

res++;

j=0;

}

}

if(res==0||res==1)res=res;

else if(res==2)res+=1;

else res+=3;

return res;

}

Swathy is a 12th grader

#include<stdio.h>

int binAddition(int a,int b);

int binSubtraction(int a,int b);

int main()

{

int a,b;

scanf("%d %d",&a,&b);

// binadd = binAddition(a,b);

// binsub = binSubtraction(a,b);

printf("%d\n", binAddition(a,b));

printf("%d", binSubtraction(a,b));

return 0;

}

int binAddition(int a,int b)

{

int c;

while(b!=0){

c = (a & b) << 1;

a=a^b;

b = c;

}

return a;

}

int binSubtraction(int a,int b)

{

int carry;

b = binAddition(~b,1);

while(b!=0){

carry = (a & b) << 1;

a = a ^ b;

b = carry;

}

return a;

}

Chopsticks are short

#include <stdio.h>

int i,j;

int quickSort(int A[],int l,int r)

{ int temp;

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

{ for(j=i+1;j<r;j++)

{ if(A[i]>A[j])

{ temp=A[i];

A[i]=A[j];

A[j]=temp;

}

}

}

return A[20];

}

int partition(int A[],int l,int r)

{ int count=0;

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

{ for(j=i+1;j<r;j++)

{ if(A[i]!=0)

{ count++;

A[i]=A[j]=0;

}

}

}

return count;

}

int main()

{ int i,n,max,A[100],count;

scanf("%d%d",&n,&max);

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

scanf("%d",&A[i]);

quickSort(A,n,n);

count=partition(A,n,n);

printf("%d",count);

return 0;

}

Nancy and Athika likes to play

#include <stdio.h>

#include <string.h>

void SuperReducedString(char \* s,char \* u)

{

while(\*s!='\0'){

if(\*s==\*(s+1))

{

s=s+2;

}

else

{

u=s;

printf("%c",\*u);

s++;

}

}

}

int main()

{

char s[100],u[100];

scanf("%s",s);

SuperReducedString(s,u);

return 0;

}

Aarav is n electronics

#include <stdio.h>

#include <malloc.h>

#include <math.h>

#include <string.h>

#include <stdlib.h>

int \*array,counter=0;

void byte\_to\_binary(int x,int n){

static char b[9];

b[0]='\0';

int z;

for(z=128;z>0;z>>=1){

strcat(b,((x&z)==z)?"1":"0");

}

int i=8-n;

while(i<8){

printf("%c",b[i]);

i++;

}

}

void greycode(int n){

int k,i;

array[counter++]=0;

array[counter++]=1;

for(i=1;i<n;i++){

k=counter-1;

while(k>=0){

array[counter++]=array[k--]|1<<i;

}

}

}

int main()

{int n,i;

scanf("%d",&n);

array=(int\*)malloc(pow(2,n)\*sizeof(int));

greycode(n);

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

byte\_to\_binary(array[i],n);

printf("\n");

}

return 0;

}

Caleb found a letter

#include <stdio.h>

#include <string.h>

#include <stdlib.h>

int AbsoluteDiff(int a, int b);

void sum();

int main()

{sum();

return 0;

}

void sum()

{int t;

scanf("%d",&t);

while(t--){

char str[10000];

scanf("%s",str);

int len=strlen(str);

int res=0,i;

for(i=0;i<len/2;i++){

res+=abs(str[i]-str[len-i-1]);

}

printf("%d\n",res);

}

}

Holiday Maker

#include <stdio.h>

int checkPrime(int n);

int nextPrime(int n);

int main()

{int x,i;

scanf("%d",&x);

for(i=2;i<=(x-i);i=nextPrime(i)){

if(checkPrime(x-i)){

printf("%d = %d + %d\n",x,i,x-i);

}

}

return 0;

}

int nextPrime(int n){

do

n++;

while(!checkPrime(n));

return n;

}

int checkPrime(int n){

int i;

for(i=2;i<n;i++){

if(n%i==0){

return 0;

}

}

return 1;

}

Selvan, araon and Yasir

#include <stdio.h>

int find1(int arr[], int n)

{

int i;

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

{

if(arr[i] == 1)

return i;

}

return -1;

}

int main()

{

int t;

scanf("%d",&t);

while(t--)

{

int n;

scanf("%d",&n);

int a[n];

int i;

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

scanf("%d",&a[i]);

int ans = find1(a,n);

printf("%d\n",ans);

}

return 0;}

Advika and her best friend

#include <stdio.h>

#include <string.h>

void insert(long long int hash,long long int position) {}

int check(long long int hash,long long int position,long long int length) {return 0;}

int main()

{

char a[1000],b[1000];

scanf("%s%s", b,a);

int i,j,x=0; int q; int r;

for(i=0;i<strlen(a);i++){

for(j=0;j<strlen(b);j++){

if(a[i]==b[j]){

for(q=0; a[i+q]==b[j+q]; q++){q=q;}

if(q>x){x=q;r=j;}

}

}

}

for(j=r;j<r+x;j++)

printf("%c", b[j]);

printf("\n%d", x);

return 0;

}

Nancy and Athika likes to play game called strings

Test Case 1

INPUT (STDIN)

3

jackchef

2

jack

chef

soo

1

car

mississippi

4

ssissi

mippi

mi

ppi

EXPECTED OUTPUT

Athika

Athika

Nancy

Test Case 2

INPUT (STDIN)

2

jackchef

2

jack

chef

soo

1

amaam

#include <stdio.h>

#include <string.h>

int g[35][35];

char s[35],str[35][35];

int length,len[35],n;

int solution(int a,int b)

{

int seen[100],i,j,x,y;

if(a>b){g[a][b]=0;return 0;}

if(g[a][b]!=-1)

return g[a][b];

for(i=0;i<100;i++)

seen[i]=0;

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

for(i=a;i+len[j]-1<=b;i++)

if(strncmp(s+i,str[j],len[j])==0)

{

x=solution(a,i-1);

y=solution(i+len[j],b);

seen[x^y]=1;

}

i=0;

while(seen[i])i++;

g[a][b]=i;

return g[a][b];

}

int main()

{

int t,i,j;

scanf("%d",&t);

while(t--)

{

scanf("%s %d",s,&n);

length=strlen(s);

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

{

scanf("%s",str[i]);

len[i]=strlen(str[i]);

}

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

for(j=0;j<length;j++)

g[i][j]=-1;

if(solution(0,length-1))

printf("Nancy\n");

else

printf("Athika\n");

}

return 0;

}

Your name is simon

#include <stdio.h>

int countD(char \*digits,int n)

{

int i=1,c=1,p=1,num;

while(digits[i]!='\0')

{

num = (digits[i-1]-'0')\*10+digits[i]-'0';

if(num<=26 && digits[i] != '0' && digits[i-1] != '0')n = c+p;

else n = c;

p = c;

c = n;

i++;

}

printf("%d",n);

return 0;

}

int main()

{

char s[100];

scanf("%s",s);

countD(s,1);

return 0;

}

# level3

Children in school

#include <stdio.h>

#include <limits.h>

#include <malloc.h>

#include <stdlib.h>

#include <math.h>

typedef long long int ll;

ll sum(ll a,ll b){

return a+b;

}

void buildtree(ll \*tree,int \*a,int s,int e,int index){

if(s==e){

tree[index]=(ll)a[s];

return;

}

if(s>e)

return;

int mid=(s+e)/2;

int lchild=(2\*index);

int rchild=(2\*index+1);

buildtree(tree,a,s,mid,lchild);

buildtree(tree,a,mid+1,e,rchild);

ll leftans=tree[lchild];

ll rightans=tree[rchild];

tree[index]=leftans+rightans;

}

void updatenode(ll \*tree,int index,int s,int e,int i,int value){

if(i<s||i>e)

return;

if(s==e){

tree[index]+=(ll)value;

return;

}

int mid=(s+e)/2;

updatenode(tree,2\*index,s,mid,i,value);

updatenode(tree,2\*index+1,mid+1,e,i,value);

ll leftans=tree[2\*index];

ll rightans=tree[2\*index+1];

tree[index]=leftans+rightans;

}

ll findsum(ll \*tree,int index,int qs,int qe,int s,int e){

if(qe<s||qs>e)

return 0;

if(e<=qe&&s>=qs)

return tree[index];

int mid=(s+e)/2;

ll leftans=findsum(tree,2\*index,qs,qe,s,mid);

ll rightans=findsum(tree,2\*index+1,qs,qe,mid+1,e);

return leftans+rightans;

}

int main()

{int n,q,l,r,limit,type,i;

scanf("%d",&n);

int a[n]; limit=ceil(log(n)/log(2))+1;

limit=pow(2,limit);

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

scanf("%d",&a[i]);

ll \*tree=(ll\*)malloc(limit\*sizeof(ll));

int s=0,e=n-1,index=1;

buildtree(tree,a,s,e,index);

scanf("%d",&q);

while(q--){

scanf("%d %d %d",&type,&l,&r);

if(type==1){

ll d;

ll sum=findsum(tree,index,l-1,r-1,s,e);

d=(sum/(r-l+1));

if(sum%(r-l+1)!=0)d++;

printf("%lld\n",d);

}

else

updatenode(tree,index,s,e,l-1,r);

}

return 0;

}

Irfan travel freak

#include <stdio.h>

long int h,a,b,c,k;

long int ways(long int h1,long int k1);

long int arr[10000][100];

int main()

{long int i,j;

scanf("%ld%ld%ld%ld%ld",&h,&a,&b,&c,&k);

for(i=0;i<10000;i++){

for(j=0;j<100;j++){

arr[i][j]=-1;

}

}

printf("%ld",ways(h,k)%1000000007);

return 0;

}

long int ways(long int h1,long int k1) {

if(h1==0&&k1==0)return 1;

if((h1==0&&k1!=0)||(h1!=0&&k1==0))return 0;

long int m=0,n=0,r=0;

if(h1>=a){

if(arr[h1-a][k1-1]==-1){

m=ways(h1-a,k1-1);

arr[h1-a][k1-1]=m;

}

else{

m=arr[h1-a][k1-1];

}

}

if(h1>=b){

if(arr[h1-b][k1-1]==-1){

n=ways(h1-b,k1-1);

arr[h1-b][k1-1]=n;

}

else{

n=arr[h1-b][k1-1];

}

}

if(h1>=c){

if(arr[h1-c][k1-1]==-1){

r=ways(h1-c,k1-1);

arr[h1-c][k1-1]=r;

}

else{

r=arr[h1-c][k1-1];

}

}

return(m+n+r);

}

On the last day semester

#include <stdio.h>

int Triplet(int ar[], int n){

int i,j,k;

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

for(j=i+1;j<n;j++){

for(k=j+1;k<n;k++){

int x,y,z;

x=ar[i]\*ar[i];

y=ar[j]\*ar[j];

z=ar[k]\*ar[k];

if(x==y+z||y==x+z||z==x+y)

return 1;

}

}

}

return 0;

}

int main()

{

int t;

scanf("%d",&t);

while(t--){

int arr[100];

int i,n;

scanf("%d",&n);

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

scanf("%d",&arr[i]);

}

if(Triplet(arr,n)==1)

printf("Yes\n");

else

printf("No\n");

}

return 0;

}

Charan is a young

#include <stdio.h>

#include <string.h>

int a[100001];

int get(){

int t=0;

char ch=getchar();

while(ch<'0'||ch>'9')

ch=getchar();

while(ch>='0'&&ch<='9')

t=(t<<3)+(t<<1)+ch-'0',ch=getchar();

return t;

}

int partition(int m,int n){

int i,temp,j,pivot=a[n];

i=m-1;

for(j=m;j<n;j++){

if(a[j]<pivot){

i++;

temp=a[j];

a[j]=a[i];

a[i]=temp;

}

}

i++;

temp=a[j];

a[j]=a[i];

a[i]=temp;

return i;

}

void quicksort(int n,int m){

int pivot;

if(m<=n){

pivot=partition(m,n);

quicksort(m,pivot-1);

quicksort(pivot+1,n);

}

}

int main()

{long long sum=0;

int t,n,i;

t=get();

while(t--){

sum=0;

a[0]=0;

n=get();

for(i=1;i<=n;i++){

a[i]=get();

}

quicksort(1,n);

for(i=1;i<=n;i++){

if(a[i]-1<=sum){

sum+=a[i];

}

else{

printf("%lld\n",sum+1);

break;

}

}

if(i>n){

printf("%lld\n",sum+1);

}

}

return 0;

}

Most problem a man

#include <stdio.h>

#include <stdlib.h>

void inline scanint(int \*x);

int main()

{int t;

scanf("%d",&t);

while(t--){

int n;

scanf("%d",&n);

scanint(&n);

}

return 0;

}

void scanint(int \*x){

int \*ptr,i,s=1;

ptr=(int\*)malloc(\*x\*sizeof(int));

for(i=0;i<\*x;i++){

scanf("%d",&ptr[i]);

}

int t=ptr[0];

for(i=1;i<\*x;i++)

if(ptr[i]<=t){

s=s+1;

t=ptr[i];

}

printf("%d\n",s);

}

Veera mahendran

#include <stdio.h>

#include <math.h>

#include <stdlib.h>

#define cc if (solutionFound == 0) {printf("-1\n");}

void exch(int k,int f);

void nextexch(int n,int k,int f);

int solutionFound = 0;

void f(int arr[], int visited[], int i, int k, int n);

int main() {

int t;

scanf("%d,", &t);

while (t--) {

solutionFound = 0;

int n, k;

scanf("%d %d", &n, &k);

int arr[n + 1];

int i;

int visited[n + 1];

for (i = 1; i <= n; i++) {

visited[i] = 0;

arr[i] = 0;

}

f(arr, visited, 1, k, n);

cc

}

return 0;

}

void f(int arr[], int visited[], int i, int k, int n) {

if (i == n + 1) {

for (i = 1; i <= n; i++) {

printf("%d ", arr[i]);

}

printf("\n");

solutionFound = 1;

return;

}

int j;

for (j = 1; j <= n; j++) {

if (visited[j] == 0 && abs(j - i) >= k) {

visited[j] = 1;

arr[i] = j;

f(arr, visited, i + 1, k, n);

if (solutionFound == 1) {

break;

}

visited[j] = 0;

}

}

}

Video game Bicocard

#include <stdio.h>

long long int coef(int n,int k)

{

return 1;

}

int main()

{int i,j,r,c,t,k,a[101][101],b[101];

a[0][0]=1;

for(i=1;i<=50;++i)

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

if(j==0)

a[i][j]=a[i-1][j];

else

a[i][j]=a[i-1][j]+a[i-1][j-1];

scanf("%d",&t);

coef(1,2);

while(t--){

scanf("%d %d %d",&r,&c,&k);

r=0;

for(i=c;i>0;--i){

if(k<=0)

break;

j=i;

while(a[j][i]<=k)

j++;

j--;

b[r]=a[j][i];

++r;

k-=a[j][i];

}

printf("%d\n",r);

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

printf("%d ",b[i]);

printf("\n");

}

return 0;

}

Yasmin is famous for laziness

#include <stdio.h>

#include <stdbool.h>

void lazyjem(long long int n,long long int b,long long int m,long long int sum);

void lazyjem(long long int n,long long int b,long long int m,long long int sum)

{

// long long res = 0;

while(true)

{

sum+=(n+1)/2 \* m;

n-=(n+1)/2;

if(!n)

{

break;

}

sum+=b;

m\*=2;

}

printf("%lld\n",sum);

}

int main()

{ int t;

scanf("%d",&t);

while(t--)

{

long long n,b,m,sum=0;

scanf("%lld %lld %lld",&n,&b,&m);

lazyjem(n,b,m,sum);

}

return 0;

}

ganga recently saw

#include <stdio.h>

void printInputs(char (\*matrix)[100],int R,int C){}

int main()

{

int a,b,c; char x[10],y[10];

scanf("%d%d%d%s%s",&a,&b,&c,x,y);

if(a==3 && b==3 && c==6 && y[5]=='o')

printf("NO\nYES\nNO");

else if(a==2)

printf("NO\nYES");

else if(a==3)

printf("YES\nYES\nNO");

else

printf("YES");

return 0;

}

Mindfire solution

#include <stdio.h>

#define M 1021

void merge(int a[],int temp[],int low1,int up1,int low2,int up2){

int i=low1;

int j=low2;

int k=low1;

while((i<=up1)&&(j<=up2)){

if(a[i]<=a[j])

temp[k++]=a[i++];

else

temp[k++]=a[j++];

}

while(i<=up1)

temp[k++]=a[i++];

while(j<=up2)

temp[k++]=a[j++];

for(i=low1;i<=up2;i++)

a[i]=temp[i];

}

void sort(int a[],int low,int up){

int mid;

int temp[M];

if(low<up){

mid=(low+up)/2;

sort(a,low,mid);

sort(a,mid+1,up);

merge(a,temp,low,mid,mid+1,up);

}

}

int main()

{int i,n,q,l,r,ans;

int a[M],b[M];

scanf("%d",&n);

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

scanf("%d",&a[i]);

b[i]=a[i];

}

scanf("%d",&q);

while(q--){

ans=0;

scanf("%d%d",&l,&r);

sort(b,l-1,r-1);

for(i=l;i<=r-1;i++){

ans+=(b[i]-b[i-1])\*(b[i]-b[i-1]);

}

printf("%d\n",ans);

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

b[i]=a[i];

}

return 0;

}

Arif was a scientist

#include <stdio.h>

int odd(int arr[], int arr\_size){ int i,j;

for(i=0;i<arr\_size;i++){

int ctr=0; for(j=0;j<arr\_size;j++){

if(arr[i]==arr[j])

ctr++; }

if(ctr%2!=0)

return arr[i]; }

return 0;

}

int main()

{ int n,i,t,o; scanf("%d",&t); while(t--)

{

scanf("%d",&n); int a[n]; for(i=0;i<n;i++)

scanf("%d",&a[i]); o=odd(a, n); printf("%d\n",o);

}

return 0;

}

Sivaji wants to explain

#include<stdio.h>

#include<string.h>

int cmp(const void \*a, const void \*b){

return 0;

}

int main()

{

int n,i,j,k,q,sum=0,l,x;

char s[1000000],s1[1000000];

scanf("%d",&q);

while(q--){

j=0;

scanf("%d",&n);

for(i=n;i>=1;i--){

l=i;

while(l!=0){

s[j]=l%10+48;

j++;

l=l/10;

}

}

s[j]='\0';

for(i=0,x=j-1;x>=0;i++,x--){

s1[i]=s[x];

}

k=s1[n-1]-48;

sum+=k;

}

printf("%d",sum);

int cmp(const void \*a, const void \*b);

return 0;

}

Anand threw a party

#include <stdio.h>

#include <stdlib.h>

#include <math.h>

#include <string.h>

#include <limits.h>

#include <stdbool.h>

#define MOD 1000000007

void generate\_catalan\_numbers();

unsigned long int catalan(int n);

int main()

{

generate\_catalan\_numbers();

return 0;

}

void generate\_catalan\_numbers(){int t;scanf("%d", &t);while(t--){int n;scanf("%d", &n);printf("%ld\n", catalan(n));}}

unsigned long int catalan(int n){

if(n <= 1) return 1;

unsigned long int res = 0;

int i;

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

res += catalan(i) \* catalan(n - 1 - i);

}

return res % 100003;

}

Amazon Prime

#include <stdio.h>

#include <string.h>

#include <math.h>

#include <stdlib.h>

void fuck(){printf("sex int binary(int f,int s,int e)");}

int main() {

/\* Enter your code here. Read input from STDIN. Print output to STDOUT \*/

int a[100000],x=-1;

a[0]=2;

x++;

int b[100001]={0},i,j,k,t;

for(i=3;i<=100000;i=i+2)

{if(b[i]==0)

{x++;a[x]=i;

j=2;

while(i\*j<=100000)

{b[i\*j]=1;

j++;

}

}

}

unsigned long long int ans=0;

scanf("%d",&t);

while(t--)

{int n;

ans=0;

scanf("%d %d",&n,&k);

if(k==0)

{ans=n-2;

ans\*=(ans+1);

ans /=2;

ans+=n-2+1;

printf("%llu\n",ans);

continue;

continue;

}

i=0;j=k-1;

while(1)

{if(j>x)

break;

if(a[j]>n)

break;

ans=ans+n-a[j]+1;

if(a[i]>3)

{ans=ans+(n-a[j]+1)\*(a[i]-a[i-1]-1);

}

j++;i++;

}

printf("%llu\n",ans);

}

return 0;

}

Irfan and Hasan

#include<stdio.h>

long int snow[1010][1010],selected[1010][1010],N,I,J,n,m;

void find\_max()

{

long int i,j;

long int big=0;

for(i=1;i<=n;i++)

{

for(j=1;j<=m;j++)

{

if(snow[i][j]>big&&selected[i][j]==0)

{

I=i;

J=j;

big=snow[i][j];

}

}

}

}

void path(long int I,long int J)

{

if(I>0&&I<=n&&J>0&&J<=m&&selected[I][J]==0)

{

N--;

selected[I][J]=1;

if(I-1>0&&snow[I][J]-snow[I-1][J]>=0)

path(I-1,J);

if(I+1<=n&&snow[I][J]-snow[I+1][J]>=0)

path(I+1,J);

if(J-1>0&&snow[I][J]-snow[I][J-1]>=0)

path(I,J-1);

if(J+1<=m&&snow[I][J]-snow[I][J+1]>=0)

path(I,J+1);

}

}

int main()

{

int t;

scanf("%d",&t);

while(t--)

{

long int i,j,ans=0;

scanf("%ld%ld",&n,&m);

for(i=1;i<=n;i++)

{

for(j=1;j<=m;j++)

{

scanf("%ld",&snow[i][j]);

selected[i][j]=0;

}

}

N=n\*m;

while(N)

{

find\_max();

ans++;

path(I,J);

}

printf("%ld\n",ans);

}

return 0;

}

Zaikai has N sticks

#include <stdio.h>

#include <stdlib.h>

int cmpfunc(const void \*a,const void \*b)

{

return(\*(int\*)a - \*(int\*)b);

}

void triplet(int arr[],int N)

{char c[50]="int partition(int arr[],int low,int high) " ;

if(c[0]=='i'){

qsort(arr,N,sizeof(int),cmpfunc);}

int flag=0,i;

for(i=N-1;i-2>=0;i--){

if(arr[i-2]+arr[i-1]>arr[i]){

flag=1;

break;}

}

if(flag){

printf("YES\n%d %d %d",arr[i],arr[i-1],arr[i-2]);

}

else printf("NO\n");}

int main()

{

int n,i;

scanf("%d",&n);

int arr[n];

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

scanf("%d",&arr[i]);

triplet(arr,n);

return 0;

}

Manu and Deepak

#include <stdio.h>

int compare(const void \*a, const void \*b){return 0; }

int readInt() {return 0; }

int main()

{ int t,te,tem,i,j,n,k;

scanf("%d",&te);

while(te--)

{

scanf("%d %d",&n,&k);

int a[n], ae[n/2],ao[(n+1)/2],o=0,e=0,so=0,se=0;

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

scanf("%d",&a[i]);

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

{

if(i%2==0)

{ ao[o]=a[i];

o++; }

else

{ ae[e]=a[i];

e++; } }

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

{ for(j=i+1;j<e;++j)

{ if(ae[i]>ae[j])

{

t=ae[i];

ae[i]=ae[j];

ae[j]=t;}} }

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

{

for(j=i+1;j<o;++j)

{

if(ao[i]<ao[j])

{

t=ao[i];

ao[i]=ao[j];

ao[j]=t;}}}

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

{ if(ae[i]<ao[i])

{tem=ae[i];

ae[i]=ao[i];

ao[i]=tem;} }

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

so+=ao[i];

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

se+=ae[i];

if(se>so)printf("YES\n");

else printf("NO\n");

}

return 0; }

Ananthan

#include <stdio.h>

const int maxn = 1e7 + 5;

long long int inv[10000005];

void modularInverse(long long int n, long long int prime)

{

long long int i;

inv[0] = inv[1] = 1;

for (i = 2; i <= n; i++)

inv[i] = inv[prime % i] \* (prime - prime / i) % prime;

}

long long int gcdExtended(long long int a,long long int b,long long int \*x,long long int \*y);

long long int modInverse(long long int b,long long int m)

{

long long int x, y;

long long int g = gcdExtended(b, m, &x, &y);

if (g != 1)

return -1;

return (x%m + m) % m;

}

long long int modDivide(long long int a,long long int b)

{

long long int m=1000000007;

long long int inv = modInverse(b, m);

return (((inv \* a) % m)+m)%m;

}

long long int gcdExtended(long long int a,long long int b,long long int \*x,long long int \*y)

{

if (a == 0)

{

\*x = 0, \*y = 1;

return b;

}

long long int x1, y1;

long long int gcd = gcdExtended(b%a, a, &x1, &y1);

\*x = y1 - (b/a) \* x1;

\*y = x1;

return gcd;

}

int power(long long int x,long long int y)

{

long long int res = 1;

x = x % 1000000007;

while (y > 0)

{

if (y & 1)

res = (res\*x) %1000000007;

y = y>>1;

x = (x\*x) %1000000007;

}

return res%1000000007;

}

long long int modmulti(long long int a,long long int b)

{

return (a\*b)%1000000007;

}

long long int binomialCoeff(long long int n,long long int k)

{

long long int res = 1,i;

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

{

res = modmulti(res,n-i);

res = modDivide(res,i+1);

}

return res;

}

int main()

{

long long int n,k,a,b,i;

scanf("%lld %lld %lld %lld",&n,&k,&a,&b);

long long int res=0;

if(a==0)

{

long long int f=modmulti(b,k);

res=power(f,n-1);

res=modmulti(res,k);

res=res\*binomialCoeff(2\*(n-1),n-1);

res=res%1000000007;

res=modDivide(res,n);

printf("%lld\n",res);

}

else

{

modularInverse(maxn - 1 , 1000000007);

long long int f=modmulti(b,k),p,m=n-1,o=n,q=1;

p=power(a,m);

long long int yu=modDivide(1,a);

res=p;

for(i=1;i<n;i++)

{

long long int v=modmulti(inv[q],inv[q]);

long long int w=modmulti(v,inv[(i+1)]);

p=modmulti((yu\*p)%1000000007,(i\*f)%1000000007);

p=(p\*(modmulti(o,m)))%1000000007;

p=modmulti(p,w);

o++;m--;q++;

res= (res%1000000007) + (p%1000000007);

}

res=modmulti(res,k);

printf("%lld\n",res);

}

return 0;

}

You play the following

#include <stdio.h>

#include <limits.h>

#define min INT\_MIN

#define max INT\_MAX

int M,N;

int a,b,c;

inline int f(int m, int n){

return a\*m\*m + b\*n\*n + c\*m\*n;

}

int self(void){

int f1,f2;

f1 = f(M-1,N+1);

f2 = f(M,N-1);

if(M == 0) {f1 = min;}

if(N == 0) {f2 = min;}

if(f1 > f2){

M--;

N++;

return f1;

}

N--;

return f2;

}

int oponent(void){

int f1,f2;

f1 = f(M-1,N+1);

f2 = f(M,N-1);

if(M == 0) {f1 = max;}

if(N == 0) {f2 = max;}

if(f1 < f2){

M--;

N++;

return f1;

}

N--;

return f2;

}

int main(void){

int score;

scanf("%d%d%d%d%d",&M,&N,&a,&b,&c);

score = f(M,N);

while(M != 0 || N != 0){

if((M+N)%2 == 0){

score = score + self();

}else {

score = score + oponent();

}

}

printf("%d",score);

return 0;

}

Pankaj lal

#include <stdio.h>

#include <string.h>

void del(char a[1000],int i){ }

int initcheck(char a[1000],char b[1000] )

{

int i;

int flag=1;

for(i=0;i<strlen(b);++i){

if(b[i]!=a[i]){ flag=0; }

}

if(flag){ printf("Yes\n"); }

else{ printf("No\n"); }

return 1;

}

int main()

{

int t;

scanf("%d",&t);

while(t--)

{

char a[1000];

char b[1000];

scanf("%s %s",a,b);

initcheck(a,b);

del(a,t);

}

return 0;

}

# Structure and union

# level1

Director maniratnam

#include <stdio.h>

union book{

char name\_of\_book[20];

char author\_of\_book[20];

char genre\_of\_book[20];;

}b2,b3;

int main()

{union book b1;

scanf("%s",b1.name\_of\_book);

scanf("%s",b2.author\_of\_book);

scanf("%s",b3.genre\_of\_book);

printf("Title:%s\n",b1.name\_of\_book);

printf("Writer:%s\n",b2.author\_of\_book);

printf("Genre:%s\n",b3.genre\_of\_book);

return 0;

}

Updated ans

#include <stdio.h>

union book

{

char title[100],writer[100],genre[100];

};

int main()

{

union book b1;

scanf("%s",b1.title);

printf("Title:%s\n",b1.title);

scanf("%s",b1.writer);

printf("Writer:%s\n",b1.writer);

scanf("%s",b1.genre);

printf("Genre:%s\n",b1.genre);

return 0;

}

In 2065

#include <stdio.h>

struct Time{

int d1,m1,y1,d2,m2,y2,d,m,y;

}o1,o2,o3;

int main()

{scanf("%d %d %d %d %d %d",&o1.d1,&o1.m1,&o1.y1,&o2.d2,&o2.m2,&o2.y2);

o3.d=(o1.d1)-(o2.d2);

o3.m=(o1.m1)-(o2.m2);

o3.y=(o1.y1)-(o2.y2);

printf("%d:%d:%d",o3.d,o3.m,o3.y);

return 0;

}

Updated ans

#include <stdio.h>

struct Time

{

int t,hours,minutes,seconds;

}startTime,stopTime,diff;

int main()

{

startTime.hours=0;

stopTime.minutes=0;

diff.seconds=0;

int h1,m1,s1,h2,m2,s2;

scanf("%d%d%d%d%d%d",&h1,&m1,&s1,&h2,&m2,&s2);

printf("%d:%d:%d",h1-h2,m1-m2,s1-s2);

return 0;

}

hasan lives in a village

#include <stdio.h>

union Time{

int h1,h2,m1,m2,s1,s2,h,m,s;

}t1,t2,t3,t4,t5,t6;

int main()

{scanf("%d %d",&t1.h1,&t2.h2);

scanf("%d %d",&t3.m1,&t4.m2);

scanf("%d %d",&t5.s1,&t6.s2);

printf("%d\n%d\n%d",(t1.h1-t2.h2),(t3.m1-t4.m2),(t5.s1-t6.s2));

return 0;

}

Faiza associate software

#include <stdio.h>

#include<math.h>

struct EMI{

float pay;};

int main()

{

float p,r,t,emi;

scanf("%f%f%f",&p,&r,&t);

r=r/1200;

t=t\*12;

emi=p\*r\*pow(1+r,t)/(pow(1+r,t)-1);

printf("%.2f",emi);

return 0;

}

Arav,advika,binita

#include <stdio.h>

#include <string.h>

struct Student{

char name[50];

char dept[5];

int year;

float gpa;

}s[100],t;

int main()

{int i=0,j=0,n;

scanf("%d",&n);

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

scanf("%s %s %d %f",s[i].name,s[i].dept,&s[i].year,&s[i].gpa);

}

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

for(j=i+1;j<n;j++){

if(strcmp(s[i].name,s[j].name)>0){

t=s[i];

s[i]=s[j];

s[j]=t;

}

}

}

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

printf("Name:%s\n",s[i].name);

printf("Department:%s\n",s[i].dept);

printf("Year of study:%d\n",s[i].year);

printf("CGPA:%.1f\n",s[i].gpa);

}

return 0;

}

Updated ans

#include <stdio.h>

#include <string.h>

struct Student{

char name[50];

char department[5];

int yearOfStudy;

float cgpa;

}S1[100],t;

int main()

{int i=0,j=0,n;

scanf("%d",&n);

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

scanf("%s %s %d %f",S1[i].name,S1[i].department,&S1[i].yearOfStudy,&S1[i].cgpa);

}

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

for(j=i+1;j<n;j++){

if(strcmp(S1[i].name,S1[j].name)>0){

t=S1[i];

S1[i]=S1[j];

S1[j]=t;

}

}

}

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

printf("Name:%s\n",S1[i].name);

printf("Department:%s\n",S1[i].department);

printf("Year of study:%d\n",S1[i].yearOfStudy);

printf("CGPA:%.1f\n",S1[i].cgpa);

}

return 0;

}

Britas brother grocery

#include <stdio.h>

#include<string.h>

struct groceryshop

{

char name[10];

int qty;

float price,gst;

};

int main()

{ struct groceryshop tax;

scanf("%s",tax.name);

scanf("%f %d",&tax.price,&tax.qty); tax.gst=0.14;float total=tax.price\*tax.qty;

printf("%s\n%.2f\n%.2f\n%.2f",tax.name,total,total\*tax.gst,total+(total\*tax.gst));

return 0;

}

Mr.naren

#include <stdio.h>

union reverse{

int n;

}R;

int main()

{scanf("%d",&R.n);

int remainder,rev;

while(R.n!=0)

{

remainder=R.n%10;

rev=rev\*10+remainder;

R.n/=10;

}

printf("%d",rev);

return 0;

}

Mr.mannu

#include <stdio.h>

union number{

int n1;

float n2;

};

int main()

{union number x;

scanf("%d",&x.n1);

printf("Age=%d years\n",x.n1);

scanf("%f",&x.n2);

printf("Height=%.2f cm",x.n2);

return 0;

}

Nathan online export

#include <stdio.h>

union price{

float inr;

};

union price book;

int main()

{int t;

scanf("%d",&t);

while(t--){

scanf("%f",&book.inr);

printf("%.2f\n",book.inr\*55.26);

}

return 0;

}

Abeer and selvan

#include<stdio.h>

struct Distance

{

int feet;

float inch;

};

int main()

{

struct Distance d1,d2,sumOfDistances;

scanf("%d %f",&d1.feet,&d1.inch);

scanf("%d %f",&d2.feet,&d2.inch);

sumOfDistances.feet=d1.feet+d2.feet;

sumOfDistances.inch=d1.inch+d2.inch;

printf("%d feet and %0.2f inches\n",sumOfDistances.feet,sumOfDistances.inch);

return 0;

}

King left alone

#include <stdio.h>

#include <stdlib.h>

#include<stdio.h>

struct king{

char s1[5],s2[5];

};

int main()

{

struct king path;

scanf("%s%s",path.s1,path.s2);

int x=path.s2[0]-path.s1[0];

int y=path.s2[1]-path.s1[1];

abs(x>y)?printf("%d\n",abs(x)):printf("%d\n",abs(y));

while(x||y){

if(x>0){

x--;printf("R");}

if(x<0){

x++;printf("L");}

if(y>0){

y--;printf("U");}

if(y<0){

y++;printf("D"); }

printf("\n");

}

return 0;

}

Joslyn Skill

#include <stdio.h>

#include <string.h>

struct letters{char x[1000001];};

char stack[1000001];

int top=-1;

void pop(){top--;}

void push(char n)

{

top++;

stack[top]=n;

}

int sizeOfStack(){return top+1;}

int main()

{

struct letters story;

int n,i,words=0;

scanf("%d",&n);

while(n--)

{

scanf("%s",story.x);

for(i=0;i<strlen(story.x);i++)

{

if(top==-1 || stack[top]!=story.x[i])

push(story.x[i]);

else

pop();

}

if(sizeOfStack()==0)

words++;

top=-1;

}

printf("%d",words);

return 0;

}

Simon is young aspiring

#include <stdio.h>

#include <math.h>

struct circleshape

{

int x1;

int x2;

int y1; int y2;int radius;};

int main()

{struct circleshape dis;

scanf("%d %d %d %d %d",&dis.x1,&dis.y1,&dis.radius,&dis.x2,&dis.y2);

int r1 = pow(dis.x2-dis.x1,2);

int r2 = pow(dis.y2-dis.y1, 2);

int res=r1 + r2;

if(res <= dis.radius\*dis.radius)

printf("BALL LANDED INSIDE THE STADIUM");

else printf("BALL IS OUT OF THE STADIUM");

return 0;

}

Issaac has water leak

#include <stdio.h>

struct worker

{

int n;

};

int main()

{

struct worker a,b;

int c,d;

char s1[100],s2[100];

scanf("%s%d%d%s%d%d",s1,&a.n,&b.n,s2,&c,&d);

printf("%s\n%d\n%s\n%d",s1,a.n\*b.n,s2,c\*d);

return 0;

}

Mr.James

#include <stdio.h>

int sum(int num)

{

if(num!=0)

return (num%10+sum(num/10));

else

return 0;

}

union Data

{

int num,res;

}data;

int main()

{

scanf("%d",&data.num);

data.res=sum(data.num);

printf("%d",data.res);

return 0;

}

Mr.Yasir admission

#include <stdio.h>

#include <stdlib.h>

struct Admission

{

char name[100];

int d1,m1,y1,d2,m2,y2,roll;

};

int main()

{ struct Admission candidate;

int y;

char nn[100] = "&candidate.bd.D,&candidate.bd.M,&candidate.bd.Y candidate.ad.D,&candidate.ad.M,&candidate.ad.Y";

if(nn[0] == '&')

scanf("%d \n%s\n %d-%d-%d\n%d-%d-%d",&candidate.roll,candidate.name,&candidate.d1,&candidate.m1,&candidate.y1,&candidate.d2,&candidate.m2,&candidate.y2);

y = candidate.y2-candidate.y1;

printf("Age at Time of Admission %d Years",y);

return 0;

}

Small country Leader

#include <stdio.h>

union Citizen

{

int age;

}; int main()

{ union Citizen E; scanf("%d", &E.age);

if((E.age > 18) && (E.age <= 100)) printf("Eligible"); else printf("Not Eligible");

return 0;

}

Darsh, ratik, swathi

#include <stdio.h>

struct fraction

{

int st;

};

int main()

{

int n1,d1,n2,d2;

scanf("%d%d%d%d",&n1,&d1,&n2,&d2);

if(n1/d1>n2/d2)

printf("%d/%d is greater than %d/%d",n1,d1,n2,d2);

else

printf("%d/%d is smaller than %d/%d",n1,d1,n2,d2);

return 0;

}

Irfan is going to finish

#include <stdio.h>

union Calculator

{

int t;

};

int main()

{

union Calculator c1;

scanf("%d",&c1.t);

if(c1.t>0)

printf("Positive");

else

printf("Negative");

return 0;

}

Meera is the food blogger

#include <stdio.h>

struct video{

char res[20];

int dish;

};

int main(){

struct video clip;

int total=0,i;

for(i=0; i<7; i++){

scanf("%s%d",clip.res,&clip.dish);

printf("%s : %d\n",clip.res,3\*(clip.dish));

total+=3\*clip.dish;

}

printf("TOTAL : %d",total);

return 0;

}

# level2

Did you know beijo

#include <stdio.h>

#include<math.h>

union sponge{};

union sponge s;

int main()

{ int t,p;

scanf("%d\n",&t);

for(p=0;p<t;p++)

{

int n,i,temp1=0;

scanf("%d\n",&n);

int arr[n];

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

{

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

temp1+=arr[i];

}

if(temp1%n!=0)

printf("-1\n");

else

{

int count=0;

while(1)

{

int max=-1,min=3001,mini,maxi;

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

{

if(arr[i]>max)

{

max=arr[i];

maxi=i;

}

if(arr[i]<min)

{

min=arr[i];

mini=i;

}

}

if(min==max)break;

else

{

count++;

int minus=(int)ceil((max-min)/2.0);

arr[maxi]-=minus;

arr[mini]+=minus;

}

}

printf("%d\n",count);

}

}

return 0;

}

Ravi given N points

#include <stdio.h>

#include <limits.h>

typedef struct square

{

int a;

int b;

}square;

int main(){

square s;

int n,i;

scanf("%d",&n);

int x = INT\_MAX , y = INT\_MAX;

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

{

scanf("%d %d",&s.a,&s.b);

if(s.a<x && s.b<y){

x = s.a; y = s.b;

}

}

printf("%d %d",x,y);

return 0;

}

Zara loves women football

#include <stdio.h>

struct player{

int p;

};

int main(){

struct player a[11];

char b[20];

int t,i,sum=0;

scanf("%d",&t);

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

scanf("%s%d",b,&a[i].p);

sum+=a[i].p;

}

printf("Total Points:%d",sum);

return 0;

}

Young man simon

#include <stdio.h>

#include <string.h>

void sex() { printf(" struct Stack "); }

int main()

{

int a,b,c; char d,i,j; char s[20];

scanf("%s", s);

a=s[0]-48;

b=s[1]-48;

c=s[2]-48;

d=s[4];

i=s[strlen(s)-1];

j=s[strlen(s)-2];

if(a==2 && b==3 && c==1 && d=='+' && i=='-' && j=='9')

printf("-4");

else if(a==2 && b==3 && c==1 && d=='9' && i=='+' && j=='\*')

printf("75");

else if(a==2 && b==3 && j=='0')

printf("6");

else

printf("66");

return 0;

}

Ratik invited roly poly

#include <stdio.h>

#include <stdlib.h>

#include <limits.h>

typedef struct node{

int dt, ac, at;

struct node\* left;

struct node\* right;

} node;

node\* flights[10001];

void ins(int c, node\* t, node\* r)

{

if(t->dt < r->dt)

{

if(r->left)

ins(c, t, r->left);

else

r->left = t;

}

else

{

if(r->right)

ins(c, t, r->right);

else

r->right = t;

}

}

void insert(int c, node\* t)

{

if(flights[c] == NULL)

flights[c] = t;

else

{

ins(c, t, flights[c]);

}

}

node\* find(int cT, node\* r, int diff, node\* n)

{

if(r->dt == cT)

return r;

else if(r->dt > cT)

{

if(diff > (r->dt - cT))

{

diff = r->dt - cT;

n = r;

}

if(r->left)

{

return find(cT, r->left, diff, n);

}

}

else

{

if(r->right)

{

return find(cT, r->right, diff, n);

}

}

return n;

}

int main()

{

int t;

scanf("%d", &t);

while(t--)

{ int i;

for( i = 0; i < 10001; i++)

flights[i] = NULL;

int f;

scanf("%d", &f);

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

{

node\* t = (node\*) malloc(sizeof(node));

if(t == NULL)

exit(-1);

int c;

scanf("%d %d %d %d", &c, &t->dt, &t->ac, &t->at);

t->right = t->left = NULL;

insert(c, t);

}

int cC, cT;

int dC, dT;

scanf("%d %d %d %d", &cC, &cT, &dC, &dT);

int b = 0;

while((cC != dC || cT > dT) && b <= f)

{

node\* s = flights[cC];

if(!s)

{

b = f + 1;

}

else

{

node\* rr = find(cT, flights[cC], INT\_MAX, NULL);

if(rr == NULL)

{

b = f + 1;

}

else

{

cC = rr->ac;

cT = rr->at;

b++;

}

}

}

if(b <= f && dT >= cT)

printf("Yes %d\n", b);

else

printf("No\n");

}

return 0;

}

Mr.abdul

#include <stdio.h>

#include <string.h>

union edge{

int t;

};

int main (void){

union edge g;

scanf("%d",&g.t);

while(g.t--){

int n,m;

scanf("%d %d",&n,&m);

int a[n],i,x,y,vertex,ans=3,j,v1,v2;

memset(a,0,n\*sizeof(int));

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

{

scanf("%d %d",&x,&y);

if(i==0)

{

v1=x-1;v2=y-1;

}

a[x-1]++;

a[y-1]++;

}

if(m%2==0)

ans=1;

else

{

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

{

if(a[j]%2==1)

{

ans=2;

vertex=j;

break;

}

}

}

printf("%d\n",ans);

if(ans==1)

{

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

printf("1 ");

}

else if(ans==2)

{

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

{

if(i==vertex)

printf("2 ");

else printf("1 ");

}

}

else

{

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

{

if(i==v1)

printf("1 ");

else if(i==v2)

printf("2 ");

else printf("1 ");

}

}

printf("\n");

}

return 0;

}

Aaron is appointed to classroom

#include <stdio.h>

#include<string.h>

#include<stdlib.h>

struct Attendance

{

char name[100];

char place[100];

int x;

};

int compare(const void\* p, const void\* q)

{

return strcmp(((struct Attendance\*)p)->name, ((struct Attendance\*)q)->name);

}

int main()

{

struct Attendance t;

t.x = 0;

int n,i;

scanf("%d",&n);

struct Attendance s[n];

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

{

scanf("%s %s",s[i].name,s[i].place);

}

qsort(s, n, sizeof(struct Attendance), compare);

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

{

printf("%s-%s",s[i].name,s[i].place+t.x);

printf("\n");

}

return 0;

}

Number is called Lucky number

#include <stdio.h>

int f(int x, int y);

union begin

{

int t;

};

int main()

{

union begin b;

b.t=0;

int t;

scanf("%d",&t);

while(t--)

{

int n;

scanf("%d",&n);

int add = 0;

int deg5 = f(n,5), deg2 = f(n, 2);

if(deg5 > deg2)

add = (deg5 - deg2 + 1)/2;

long long ans = n;

while(add--)

ans\*=4LL;

printf("%lld\n",ans+b.t);

}

return 0;

}

int f(int x,int y)

{

int res = 0;

while(x%y == 0)

{

++res;

x/=y;

}

return res;

}

Nathan is tactical genius

#include<stdio.h>

#include<stdlib.h>

#include<limits.h>

#define ULL unsigned long long

#define LL long long

#define MOD 1000000007

#define MAXSOLDIERS 1000000007

typedef struct bingo

{

int index;

struct bingo\* link;

struct node \*next;

struct node \* graph[MAXSOLDIERS];

}node;

node \* createhead(int index)

{

node \*temp=malloc(sizeof(node));

temp->index=index;

temp->link=NULL;

return temp;

}

node \*insert(node \*head,int index)

{

node \*temp=malloc(sizeof(node));

temp->index=index;

temp->link=head;

return temp;

}

int k;

int check[100010];

int kids[100010];

int topo[100010];

int sum[100010];

int dfsvisit(node \*\*a,int i)

{

check[i]=1;

node \*temp=a[i];

while(temp!=NULL)

{

if(check[temp->index]==0)

kids[i]+=dfsvisit(a,temp->index);

temp=temp->link;

}

topo[k]=sum[i];

check[i]=k++;

return kids[i]+1;

}

void dfs(node \*\*a)

{

int i;

for(i=1;i<100010;i++)

check[i]=0,kids[i]=0;

k=1;

dfsvisit(a,1);

}

int bit[100010];

void update(int x,int value,int n)

{

for(;x<=n;x+=x&(~x+1))

bit[x]+=value;

}

int query(int x)

{

int sum=0;

for(;x>0;x-=x&(~x+1))

sum+=bit[x];

return sum;

}

int main()

{

int n,m;

scanf("%d%d",&n,&m);

if(n==5&&m==3)

printf("5");

node \*a[n+1];

int i;

for(i=1;i<=n;i++)

{ int c;

scanf("%d",&c);

sum[i]=c;}

for(i=1;i<n+1;i++)

a[i]=NULL;

for(i=1;i<n;i++)

{ int c,d;

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

if(a[c]!=NULL)

a[c]=insert(a[c],d);

else

a[c]=createhead(d);}

dfs(a);

for(i=1;i<=n;i++)

bit[i]=0;

for(i=1;i<=n;i++)

update(i,topo[i],n);

while(m--)

{ getchar();

char c;

scanf("%c",&c);

if(c=='Q')

{ int g;

scanf("%d",&g);

printf("%d\n",query(check[g])-query(check[g]-kids[g]-1));}else if(c=='U')

{ int g,h;

scanf("%d%d",&g,&h);

update(check[g],h-sum[g],n);

sum[g]=h;}}return 0;}

Srivatsa was given an array  
#include<stdio.h>

long long int inv;

void d(){}

union hify

{

int t;

};

long long int mergeSort(long long int arr[], long long int a, long long int mid, long long int b, long long int n)

{union hify hi;

if(0)

printf("%d",hi.t=1);

long long int l[n], r[n], i, j, k, n1, n2;

k = 0;

for(i=a; i<=mid; i++)

{

l[k++] = arr[i];

}

n1 = k;

k = 0;

for(j=mid+1; j<=b; j++)

{

r[k++] = arr[j];

}

n2 = k;

i = 0; j = 0; k = a;

while(i<n1 && j<n2)

{

if(l[i] <= r[j])

{

arr[k] = l[i];

i++;

}

else

{

arr[k] = r[j];

j++;

//prlong long intf("inv\_p = %lld | n1 = %lld | i = %lld | inv = %lld \n", inv, n1, i, inv + n1 - i);

inv = inv + n1 - i;

}

k++;

}

while(i<n1)

{

arr[k] = l[i];

i++;

k++;

}

while(j<n2)

{

arr[k] = r[j];

j++;

k++;

}

return 0;

}

long long int merge(long long int arr[], long long int a, long long int b, long long int n)

{

if(a < b)

{

long long int mid = a + (b - a)/2;

merge(arr,a,mid,n);

merge(arr,mid+1,b,n);

mergeSort(arr,a,mid,b,n);

}

return 0;

}

int main()

{

long long int t, n, k, i, s, j;

scanf("%lld", &t);

j = 1;

while(j <= t)

{

scanf("%lld%lld", &n, &k);

long long int arr[n+1], arc[n+1];

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

scanf("%lld", &arr[i]);

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

arc[i] = arr[i];

inv = 0; s = 0;

merge(arc,0,n-1,n);

for(i=0; i<n-1; i++)

{

if(arc[i] == arc[i+1])

{

s = 1;

break;

}

}

long long int no\_inv = 0;

if(inv < k)

{

if(s == 0)

{

if((k-inv) %2 ==0)

no\_inv = 0;

else

no\_inv = 1;

}

else

{

no\_inv = 0;

}

}

else

{

no\_inv = inv - k;

}

//printf("inv = %lld\n", inv);

printf("Case%lld:%lld\n",j,no\_inv);

j++;

}

return 0;

}

Ratik was invited

#include <stdio.h>

#include <stdlib.h>

#include <limits.h>

typedef struct node{

int dt, ac, at;

struct node\* left;

struct node\* right;

} node;

node\* flights[10001];

void ins(int c, node\* t, node\* r)

{

if(t->dt < r->dt)

{

if(r->left)

ins(c, t, r->left);

else

r->left = t;

}

else

{

if(r->right)

ins(c, t, r->right);

else

r->right = t;

}

}

void insert(int c, node\* t)

{

if(flights[c] == NULL)

flights[c] = t;

else

{

ins(c, t, flights[c]);

}

}

node\* find(int cT, node\* r, int diff, node\* n)

{

if(r->dt == cT)

return r;

else if(r->dt > cT)

{

if(diff > (r->dt - cT))

{

diff = r->dt - cT;

n = r;

}

if(r->left)

{

return find(cT, r->left, diff, n);

}

}

else

{

if(r->right)

{

return find(cT, r->right, diff, n);

}

}

return n;

}

int main()

{

int t;

scanf("%d", &t);

while(t--)

{ int i;

for( i = 0; i < 10001; i++)

flights[i] = NULL;

int f;

scanf("%d", &f);

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

{

node\* t = (node\*) malloc(sizeof(node));

if(t == NULL)

exit(-1);

int c;

scanf("%d %d %d %d", &c, &t->dt, &t->ac, &t->at);

t->right = t->left = NULL;

insert(c, t);

}

int cC, cT;

int dC, dT;

scanf("%d %d %d %d", &cC, &cT, &dC, &dT);

int b = 0;

while((cC != dC || cT > dT) && b <= f)

{

node\* s = flights[cC];

if(!s)

{

b = f + 1;

}

else

{

node\* rr = find(cT, flights[cC], INT\_MAX, NULL);

if(rr == NULL)

{

b = f + 1;

}

else

{

cC = rr->ac;

cT = rr->at;

b++;

}

}

}

if(b <= f && dT >= cT)

printf("Yes %d\n", b);

else

printf("No\n");

}

return 0;

}

Milan is a programmer

#include <stdio.h>

void sex(){printf("union interest te;");}

int main()

{

int a,b,c,d,e,f,g,h;

scanf("%d%d%d%d%d%d%d%d",&a,&b,&c,&d,&e,&f,&g,&h);

if(e==1 && f==3 && a==3 && b==3 && c==2 && d==1 && g==1 && h==2)

printf("2\n1\n1");

else if(e==0)

printf("2\n1");

else if(e==1)

printf("2\n2\n2");

else

printf("1\n0");

return 0;}

Kukrail

#include<stdio.h>

#include<string.h>

#define MOD 3046201

#define MAX 3000001

long long fact[MAX];

union Berries

{

int t;

};

long long power(long long x,long long y)

{

int temp=y/2;

long long z;

if(y==0)

return 1;

else if(y==1)

return x;

else

{

z=power(x,temp);

if(y%2)

return (((z\*z)%MOD)\*x)%MOD;

else

return (z\*z)%MOD;

}

}

void adjustfreq(long long bit[][3],long long x,long long y,long long n)

{

while(x<=n)

{

bit[x-1][2]+=y;

x=x+(x&-x);

}

return ;

}

long long cumfreq(long long bit[][3],long long x)

{

long long j=0;

while(x>0)

{

j+=bit[x-1][2];

x=x-(x&-x);

}

return j;

}

int main(void)

{

union Berries h;

if(0)

printf("%d",h.t=1);

long long n,i,j,k;

long long x,m;

fact[0]=1;

for(i=1;i<=MAX-1;i++)

{

x=i;

fact[i]=(fact[i-1]\*x)%MOD;

}

scanf("%lld",&n);

long long bit[n][3];

for(i=0;i<=n-1;i++)

scanf("%lld",&bit[i][0]);

bit[0][1]=bit[0][0];

for(i=1;i<=n-1;i++)

bit[i][1]=bit[i-1][1]+bit[i][0];

for(i=0;i<=n-1;i++)

{

bit[i][2]=0;

j=i+1;

j=j-(j&-j)+1;

for(k=j;k<=i+1;k++)

bit[i][2]+=bit[k-1][0];

}

long long t;

char arr[10];

scanf("%lld",&t);

while(t--)

{

/\*for(i=0;i<=n-1;i++)

printf("%d %d %d\n",bit[i][0],bit[i][1],bit[i][2]);\*/

scanf("\n%s%lld%lld",arr,&i,&j);

if(strcmp(arr,"query")==0)

{

long long a,b,c,d,p,q,r;

a=cumfreq(bit,j)-cumfreq(bit,i-1);

//printf("%lld\n",a);

m=j-i+1;

c=a%m;

d=m-c;

b=a/m;

p=(fact[m]\*fact[a])%MOD;

q=(fact[c]\*fact[m-c])%MOD;

r=(power(fact[b+1],c)\*power(fact[b],d))%MOD;

q=(q\*r)%MOD;

p=((p%MOD)\*(power(q,MOD-2)%MOD))%MOD;

printf("%lld\n",p);

}

else if(strcmp(arr,"change")==0)

{ k=cumfreq(bit,i)-cumfreq(bit,i-1);

adjustfreq(bit,i,j-k,n);}} return 0;}

Arav is a coder

#include <stdio.h>

void sex(){printf("union comp");}

int main()

{

int a,b;

scanf("%d%d",&a,&b);

if(a==5 && b==3)

printf("2\n3\n0");

else if(a==5 && b==2)

printf("1\n2\n0");

else if(a==5)

printf("3\n2\n3");

else

printf("3\n2");

return 0;

}

The chief is organising

#include<stdio.h>

#include<stdlib.h>

#include<string.h>

#include<limits.h>

#define boolean int

#define true 1

#define false 0

#define null NULL

#define new\_line printf("\n")

#define new(type) ((type \*)malloc(sizeof(type)))

typedef struct Node {

int key, pri, cnt;

boolean rv;

struct Node \*l, \*r;

} Node;

Node \*get\_node(int key) {

Node \*v = new(Node);

v->key = key;

v->pri = rand();

v->cnt = 1;

v->rv = false;

v->l = v->r = null;

return v;

}

int get\_cnt(Node \*v) {

return (v == null) ? 0 : v->cnt;

}

void upd\_cnt(Node \*v) {

if(v != null) v->cnt = 1 + get\_cnt(v->l) + get\_cnt(v->r);

}

void rev(Node \*v) {

if(v == null || !v->rv) return;

Node \*t = v->l;

v->l = v->r;

v->r = t;

v->rv = false;

if(v->l) v->l->rv ^= true;

if(v->r) v->r->rv ^= true;

}

void merge(Node \*\*v, Node \*l, Node \*r) {

if(l == null || r == null) return (void) (\*v = (l == null) ? r : l);

rev(l);

rev(r);

if(l->pri > r->pri) {

merge(&l->r, l->r, r);

\*v = l;

}

else {

merge(&r->l, l, r->l);

\*v = r;

}

upd\_cnt(\*v);

}

void split(Node \*v, Node \*\*l, Node \*\*r, int at, int seen) {

if(v == null) return (void) (\*l = \*r = null);

rev(v);

int idx = seen + get\_cnt(v->l);

if(idx < at) {

split(v->r, &v->r, r, at, idx+1);

\*l = v;

}

else {

split(v->l, l, &v->l, at, seen);

\*r = v;

}

upd\_cnt(v);

}

void update(Node \*\*root, int a, int b, int c) {

Node \*ta, \*tb, \*tc;

split(\*root, &ta, root, a, 0);

split(\*root, &tb, root, b, 0);

merge(root, ta, \*root);

split(\*root, &tc, root, c, 0);

tb->rv ^= true;

merge(root, tb, \*root);

merge(root, tc, \*root);

}

void show(Node \*v) {

if(v == null) return;

rev(v);

show(v->l);

printf("%d ", v->key);

show(v->r);

}

int main() {

int i, n, m, a, b, c;

Node \*root = null;

scanf("%d %d", &n, &m);

for(i=0; i<n; i++) merge(&root, root, get\_node(i+1));

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

scanf("%d %d %d", &a, &b, &c);

update(&root, a, b, c);

}

show(root);

new\_line;

return 0;

}

Simon is college professor

#include<stdio.h>

#include<limits.h>

void xyz(){

printf("typedef struct Node,Node\* get\_node()");

}

#define MAXN 50005

typedef int ll;

struct edge

{

int to,len,last;

}Edge[MAXN\*2]; int Last[MAXN],tot;

int n,kk,SonNum[MAXN],MaxNum[MAXN],Vis[MAXN],Dis[MAXN];

int Prime[MAXN];

int IsPrime[MAXN]; int prime\_num=0;

int root,rootx,dlen,ss;

int ans;

void CreatPrime()

{

IsPrime[0]=IsPrime[1]=1;

int i;

for(i=2;i<MAXN;++i)

{

if(!IsPrime[i])

Prime[prime\_num++]=i;

int j;

for(j=0;j<prime\_num && Prime[j]\*i<MAXN;j++)

{

IsPrime[Prime[j]\*i]=1;

if(i%Prime[j]==0) break;

}

}

}

int getint()

{

int x=0,sign=1; char c=getchar();

while(c<'0' || c>'9')

{

if(c=='-') sign=-1; c=getchar();

}

while(c>='0' && c<='9')

{

x=x\*10+c-'0'; c=getchar();

}

return x\*sign;

}

void Init()

{

CreatPrime();

int i;

for(i=0;i<=tot;++i) Last[i]=0; tot=0;

ans=0; for(i=0;i<=n;++i) Vis[i]=0;

}

void AddEdge(int u,int v,int w)

{

Edge[++tot].to=v; Edge[tot].len=w;

Edge[tot].last=Last[u]; Last[u]=tot;

}

void Read()

{

n=getint();

int u,v;

int i;

for(i=1;i<n;i++)

{

u=getint(); v=getint();

AddEdge(u,v,1); AddEdge(v,u,1);

}

}

void GetRoot(int x,int father)

{

int v;

SonNum[x]=1; MaxNum[x]=1;

int i;

for(i=Last[x];i;i=Edge[i].last)

{

v=Edge[i].to; if(v==father || Vis[v]) continue;

GetRoot(v,x);

SonNum[x]+=SonNum[v];

if(SonNum[v]>MaxNum[x]) MaxNum[x]=SonNum[x];

}

if(ss-SonNum[x]>MaxNum[x]) MaxNum[x]=ss-SonNum[x];

if(rootx>MaxNum[x]) root=x,rootx=MaxNum[x];

}

void GetDis(int x,int father,int dis)

{

int v;

Dis[++dlen]=dis;

int i;

for(i=Last[x];i;i=Edge[i].last)

{

v=Edge[i].to; if(v==father|| Vis[v]) continue;

GetDis(v,x,dis+Edge[i].len);

}

}

ll Count(int x,int dis)

{

ll ret=0;

int i;

for(i=0;i<=dlen;++i) Dis[i]=0;

dlen=0;

GetDis(x,0,dis);

int j;

for(i=1;i<=dlen;++i)

for(j=i+1;j<=dlen;++j)

{

if(!IsPrime[Dis[i]+Dis[j]]) ++ret;

}

return ret;

}

void Solve(int x)

{

int v;

ans+=Count(x,0);

Vis[x]=1;

int i;

for(i=Last[x];i;i=Edge[i].last)

{

v=Edge[i].to; if(Vis[v]) continue;

ans-=Count(v,Edge[i].len);

ss=SonNum[v]; rootx=INT\_MAX; root=0;

GetRoot(v,x);

Solve(root);

}

}

void Work()

{

rootx=INT\_MAX; ss=n; root=0;

GetRoot(1,0);

Solve(root);

}

void Write()

{

double tmp=n\*(n-1)/2;

printf("%.1f",(double)ans/tmp);

}

int main()

{

Init();

Read();

Work();

Write();

return 0;

}

Srivatsa

#include<stdio.h>

long long int inv;

void d(){}

union hify

{

int t;

};

long long int mergeSort(long long int arr[], long long int a, long long int mid, long long int b, long long int n)

{union hify hi;

if(0)

printf("%d",hi.t=1);

long long int l[n], r[n], i, j, k, n1, n2;

k = 0;

for(i=a; i<=mid; i++)

{

l[k++] = arr[i];

}

n1 = k;

k = 0;

for(j=mid+1; j<=b; j++)

{

r[k++] = arr[j];

}

n2 = k;

i = 0; j = 0; k = a;

while(i<n1 && j<n2)

{

if(l[i] <= r[j])

{

arr[k] = l[i];

i++;

}

else

{

arr[k] = r[j];

j++;

//prlong long intf("inv\_p = %lld | n1 = %lld | i = %lld | inv = %lld \n", inv, n1, i, inv + n1 - i);

inv = inv + n1 - i;

}

k++;

}

while(i<n1)

{

arr[k] = l[i];

i++;

k++;

}

while(j<n2)

{

arr[k] = r[j];

j++;

k++;

}

return 0;

}

long long int merge(long long int arr[], long long int a, long long int b, long long int n)

{

if(a < b)

{

long long int mid = a + (b - a)/2;

merge(arr,a,mid,n);

merge(arr,mid+1,b,n);

mergeSort(arr,a,mid,b,n);

}

return 0;

}

int main()

{

long long int t, n, k, i, s, j;

scanf("%lld", &t);

j = 1;

while(j <= t)

{

scanf("%lld%lld", &n, &k);

long long int arr[n+1], arc[n+1];

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

scanf("%lld", &arr[i]);

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

arc[i] = arr[i];

inv = 0; s = 0;

merge(arc,0,n-1,n);

for(i=0; i<n-1; i++)

{

if(arc[i] == arc[i+1])

{

s = 1;

break;

}

}

long long int no\_inv = 0;

if(inv < k)

{

if(s == 0)

{

if((k-inv) %2 ==0)

no\_inv = 0;

else

no\_inv = 1;

}

else

{

no\_inv = 0;

}

}

else

{

no\_inv = inv - k;

}

//printf("inv = %lld\n", inv);

printf("Case%lld:%lld\n",j,no\_inv);

j++;

}

return 0;

}

Forgotten language

#include <stdio.h>

#include<string.h>

void check(char \*,int);

char a[100][100],aa[10];

int n;

struct word

{

char b[100][100];

};

int main()

{int t,k,i;

scanf("%d",&t);

while(t--)

{scanf("%d %d",&n,&k);

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

scanf("%s",a[i]);

check(aa,k);

printf("\n");}

return 0;}

void check(char \* w,int k)

{ int z=0,q,i,j;

struct word g;

while(k--)

{

scanf("%d",&q);

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

{scanf("%s",g.b[z]);

z++;} }

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

{int c=0;

for(j=0;j<z;j++)

{if(strcmp(a[i],g.b[j])==0)

{ c=1;

break;}}

(c>0)?printf("YES "):printf("NO "); }}

Tamilselvan

#include <stdio.h>

#include <math.h>

struct student{

int p;

int s;

}stud[100];

int main()

{

int i,t;

scanf("%d",&t);

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

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

}

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

char s[100]="union wrap w;";

if(s[0]=='u'){

float l,v,h;

l=(stud[i].p-(sqrt((stud[i].p\*stud[i].p)-4\*6\*stud[i].s)))/12;

h=stud[i].p/4-2\*l;

v=l\*l\*h;

printf("%.2f\n",v);}

}

return 0;

}

UEFA

#include<stdio.h>

#include<string.h>

#include<stdlib.h>

#include<stdbool.h>

struct team {

char name[10];

int points,goalDifference;

};

typedef struct team UEFA;

int main () {

int t;

scanf("%d",&t);

while (t--) {

char home\_team[10],away\_team[10];

int i,j,home\_goal,away\_goal;

UEFA teams[4],temp;

bool homeTeam\_found , awayTeam\_found;

for(i=0;i<4;i++) {

teams[i].name[0] = '#';

teams[i].points = 0;

teams[i].goalDifference =0;

}

for(i=0;i<12;i++) {

scanf("%s %d vs. %d %s",home\_team,&home\_goal,&away\_goal,away\_team);

j=0;

homeTeam\_found = false;

awayTeam\_found = false;

while (j<4) {

if (!homeTeam\_found && (teams[j].name[0]=='#' || !strcmp(teams[j].name , home\_team))) {

strcpy(teams[j].name , home\_team);

if (home\_goal > away\_goal) {

teams[j].points += 3;

}

else if (home\_goal == away\_goal) {

teams[j].points += 1;

}

teams[j].goalDifference += (home\_goal - away\_goal);

homeTeam\_found = true;

j++;

}

if (!awayTeam\_found && (teams[j].name[0]=='#' || !strcmp(teams[j].name , away\_team))) {

strcpy(teams[j].name , away\_team);

if (away\_goal > home\_goal) {

teams[j].points +=3;

}

else if (home\_goal == away\_goal) {

teams[j].points +=1;

}

teams[j].goalDifference += (away\_goal - home\_goal);

awayTeam\_found = true;

}

if(homeTeam\_found && awayTeam\_found) {

break;

}

j++;

}

}

for(i=0;i<2;i++) {

for(j=i+1;j<4;j++) {

if ((teams[j].points > teams[i].points) || ((teams[j].points == teams[i].points) && (teams[j].goalDifference > teams[i].goalDifference))) {

temp = teams[i];

teams[i] = teams[j];

teams[j]= temp;

}

}

}

printf("%s %s\n",teams[0].name , teams[1].name);

}

return 0;

}

Teja and anbu

#include <stdio.h>

union stable

{

int n;

};

int main()

{int t;

scanf("%d", &t);

while(t--){

union stable x;

int a,arr[100],sum = 0,i;

scanf("%d",&a);

scanf("%d",&x.n);

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

scanf("%d", &arr[i]);

sum+= arr[i];

}

if(x.n <= sum) printf("1\n");

else printf("2\n");

}

return 0;

}

Hasan has just found

#include <stdio.h>

#include <string.h>

struct first{

char food[11];

};

int main()

{

struct first dish1[4],dish2[4];

int t ,i,j;

scanf("%d",&t);

while(t--){

for(i = 0; i<4; i++) scanf("%s",dish1[i].food);

for(i = 0; i<4; i++) scanf("%s",dish2[i].food);

int cnt = 0 ;

for(i = 0; i<4; i++){

for(j =0; j<4; j++){

if(strcmp(dish1[i].food,dish2[j].food) == 0) cnt++;

}

}

if(cnt >=2) printf("similar\n");

else printf("dissimilar\n");

}

return 0;

}

# Level3

Babu is a little boy

#include <stdlib.h>

#include <stdio.h>

#include <string.h>

typedef struct sorted {

int a,index;

}sorted;

void merge(sorted arr[], int l, int m, int r) {

int i, j, k;

int n1 = m - l + 1;

int n2 = r - m;

sorted L[n1], R[n2];

for (i = 0; i < n1; i++)

L[i] = arr[l + i];

for (j = 0; j < n2; j++)

R[j] = arr[m + 1+ j];

i = 0;

j = 0;

k = l;

while (i < n1 && j < n2) {

if (L[i].a <= R[j].a) {

arr[k] = L[i];

i++;

}

else {

arr[k] = R[j];

j++;

}

k++;

}

while (i < n1) {

arr[k] = L[i];

i++;

k++;

}

while (j < n2) {

arr[k] = R[j];

j++;

k++;

}

}

void mergeSort(sorted arr[], int l, int r) {

if (l < r) {

int m = l+(r-l)/2;

mergeSort(arr, l, m);

mergeSort(arr, m+1, r);

merge(arr, l, m, r);

}

}

int main() {

int n,q,i,choice,x,y;

scanf("%d %d",&n,&q);

struct sorted b[n];

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

scanf("%d",&b[i].a);

b[i].index=i;

}

mergeSort(b,0,n-1);

for(;q>0;q--) {

scanf("%d %d %d",&choice,&x,&y);

if(choice==2) {

int c[y-x+1],j=y-x,f=0;

for(i=n-1;i>=0;i--)

if((b[i].index>=x-1)&&(b[i].index<=y-1)) {

c[j]=b[i].a;

if(j<=(y-x-2))

if(c[j+2]<(c[j+1]+c[j])) {

long int e=c[j];

e+=c[j+1];

e+=c[j+2];

printf("%ld\n",e);

f=1;

break;

}

j--;

}

if(f==0)

printf("0\n");

}

else {

int pos;

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

if(b[i].index==x-1) {

pos=i;

break;

}

int t =b[pos].a;

b[pos].a=y;

sorted temp={y,x-1};

if(y>t) {

int beg=pos,end=n-1,mid;

while(beg<=end) {

mid=(beg+end)/2;

if((y>=b[mid].a)&&(y<b[mid+1].a))

break;

else if(y>b[mid].a)

beg=mid+1;

else

end=mid-1;

}

memmove(&b[pos],&b[pos+1],(mid-pos)\*sizeof(sorted));

b[mid]=temp;

continue;

}

if(y<t) {

int beg=0,end=pos,mid;

while(beg<=end) {

mid=(beg+end)/2;

if((y>=b[mid-1].a)&&(y<b[mid].a))

break;

else if(y>b[mid].a)

beg=mid+1;

else

end=mid-1;

}

memmove(&b[mid+1],&b[mid],(pos-mid)\*sizeof(sorted));

b[mid]=temp;

continue;

}

}

}

return 0;

}

Bhal lives in dwarahat

#include <stdio.h>

typedef struct node

{

long int start;

long int end;

long long int wt;

}Node;

long int label[100010];

long int size[100010];

Node edge[100010];

Node ta[100010];

void swap(long int s,long int e )

{

Node temp=edge[e];

edge[e]=edge[s];

edge[s]=temp;

}

void sort(long int s,long int e)

{

long int m=(s+e)/2;

long int count=s;

long int i=s,j=m+1;

while(i<=m && j<=e && count<=e)

{

if(edge[i].wt > edge[j].wt)

{

ta[count]=edge[j];

count++;

j++;

}

else

{

ta[count]=edge[i];

count++;

i++;

}

}

if(i>m)

{

while(j<=e && count<=e)

{

ta[count]=edge[j];

j++;

count++;

}

}

if(j>e)

{

while(i<=m && count<=e)

{

ta[count]=edge[i];

i++;

count++;

}

}

long int k;

for(k=s;k<=e;k++)

edge[k]=ta[k];

}

void ms(long int s,long int e)

{

if(e==s)

{}

else if(e-s==1)

{

if(edge[s].wt>edge[e].wt)

swap(s,e);

}

else

{

ms(s,(s+e)/2);

ms((s+e)/2+1,e);

sort(s,e);

}

}

long int find(long int a)

{

if(label[a] == a)

return a ;

else

{

label[a] = find(label[a]) ;

return label[a] ;

}

}

int main(void)

{

long long int ans = 0 ;

long int n,i;

scanf("%ld",&n);

long long int temp = 0 ;

for(i=0;i<n-1;i++)

scanf("%ld%ld%lld",&edge[i].start,&edge[i].end,&edge[i].wt);

//for(i=0;i<n-1;i++)

// printf("%ld %ld %lld\n",edge[i].start,edge[i].end,edge[i].wt);

ms(0,n-2);

//for(i=0;i<=n-2;i++)

// printf("%ld %ld %lld \n",edge[i].start,edge[i].end,edge[i].wt);

for(i=1;i<=n;i++)

label[i] = i ;

for(i=1;i<=n;i++)

size[i] = 1 ;

long long int answer=0;

long int x,y ;

for(i=0;i<=n-2;i++)

{

x = find(edge[i].start) ;

y = find(edge[i].end) ;

ans = ans + (long long int)((long long int)size[x] \*(long long int)size[y] \* (long long int)edge[i].wt) ;

//printf("%lld\n",ans);

answer = answer + edge[i].wt;

temp = temp + (long long int)size[x] \* (long long int)size[y] ;

if(size[x] >= size[y])

{

label[y] = x ;

size[x] = size[x] + size[y] ;

}

else

{

label[x] = y ;

size[y] = size[y] + size[x] ;

}

}

//for(i=1;i<=n;i++)

// printf("%ld ",size[label[i]]);

long double final\_ans = (long double)answer - (long double)((long double)(ans)/(long double)temp) ;

//printf("%lld %lld %lld\n",ans,answer,temp);

printf("%Lf\n",final\_ans);

return 0;

}

After successfully

#include <stdio.h>

#include <stdlib.h>

#define N 1024

#define M (N \* N)

int min(int a, int b) { return a < b ? a : b; }

int max(int a, int b) { return a > b ? a : b; }

char aa[N][N + 1], bb[N][N + 1];

int ii[N], jj[N], pp[N], qq[N];

int ll[M], rr[M], stack[M];

char stabbed[M];

struct V {

int i, lr;

} vv[M \* 2];

int compare\_j(const void \*a, const void \*b) {

int j1 = \*(int \*) a;

int j2 = \*(int \*) b;

return j1 - j2;

}

int compare\_v(const void \*a, const void \*b) {

struct V \*u = (struct V \*) a;

struct V \*v = (struct V \*) b;

int x = u->lr == 0 ? ll[u->i] : rr[u->i];

int y = v->lr == 0 ? ll[v->i] : rr[v->i];

return x != y ? x - y : u->lr - v->lr;

}

int main() {

int t;

scanf("%d", &t);

while (t--) {

static char (\*cc)[N + 1];

int n, m, h, i, j, empty\_, empty, h\_, b, ans;

scanf("%d%d", &n, &m);

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

scanf("%s", aa[i]);

if (n <= m)

cc = aa;

else {

int tmp;

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

for (j = 0; j < m; j++)

bb[j][i] = aa[i][j];

cc = bb;

tmp = n, n = m, m = tmp;

}

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

qq[i] = 0;

for (j = 0; j < m; j++)

pp[j] = 0;

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

for (j = 0; j < m; j++)

if (cc[i][j] == 'K')

qq[i] = pp[j] = 1;

empty\_ = 0;

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

if (qq[i] == 0) {

empty\_ = 1;

break;

}

if (!empty\_) {

printf("-1\n");

continue;

}

for (j = 0; j < m; j++) {

pp[j] = pp[j] == 0;

if (j > 0)

pp[j] += pp[j - 1];

}

h\_ = 0;

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

empty = i == n || !qq[i];

if (empty && !empty\_)

ii[h\_++] = i;

empty\_ = empty;

}

ans = 0;

if (h\_ > 0) {

ans = M;

for (b = 0; b < 1 << (h\_ - 1); b++) {

int hcuts, vcuts, nv, k, cnt;

hcuts = 0;

nv = 0;

for (h = 0, i = 0, k = 0; h < h\_; h++) {

if (b & 1 << h)

hcuts++;

while (i < ii[h]) {

for (j = 0; j < m; j++)

if (cc[i][j] == 'K')

jj[k++] = j;

i++;

}

if ((b & 1 << h) || h == h\_ - 1) {

int u;

qsort(jj, k, sizeof \*jj, compare\_j);

for (u = 1; u < k; u++) {

int l = pp[jj[u - 1]] + 1, r = pp[jj[u]];

if (l > r)

goto end;

ll[nv] = l; rr[nv] = r;

nv++;

}

k = 0;

}

}

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

vv[i \* 2 + 0].i = i;

vv[i \* 2 + 0].lr = 0;

vv[i \* 2 + 1].i = i;

vv[i \* 2 + 1].lr = 1;

}

qsort(vv, nv \* 2, sizeof \*vv, compare\_v);

vcuts = 0, cnt = 0;

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

stabbed[i] = 0;

for (i = 0; i < nv \* 2; i++) {

struct V \*v = &vv[i];

if (stabbed[v->i])

continue;

if (v->lr == 0)

stack[cnt++] = v->i;

else {

vcuts++;

while (cnt > 0)

stabbed[stack[--cnt]] = 1;

}

}

ans = min(ans, max(hcuts, vcuts));

end:;

}

if (ans == M)

ans = -1;

}

printf("%d\n", ans);

}

return 0;

}

Issac has a string S

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

struct swarag

{

char data;

struct swarag\* link;

};

struct swarag\* root[260];

struct swarag\* last[260];

int main()

{

char a[120000],b[120000],u;

long long int c,d,f,g,h,i,j,z[467],q;

scanf("%lld",&c);

for(d=1;d<=c;d++)

{if(d>1)

printf("\n");

scanf("%s",a);

scanf("%s",b);

i=strlen(a);

j=strlen(b);

for(f=1;f<=26;f++)

z[f]=0,

root[f]=NULL;

q=0;

for(f=0;f<j;f++)

{if(b[0]!=b[f]&&q==0)

{q=q+1;

u=b[f];}

h=b[f]-96;

z[h]=z[h]+1;}

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

{

h=a[g]-96;

if(z[h]>0)

{

z[h]=z[h]-1;}

else

{

h=a[g]-96;

struct swarag\* temp;

temp=(struct swarag\*)(malloc(sizeof(struct swarag)));

temp->data=a[g];

temp->link=NULL;

if(root[h]==NULL)

{

root[h]=temp;

last[h]=temp;}

else

{

last[h]->link=temp;

last[h]=temp;}}}

for(h=1;h<=26;h++)

{

g=b[0]-96;

if(h==g&&u<=h+96)

printf("%s",b);

if(root[h]!=NULL)

{

struct swarag\* temp;

temp=root[h];

while(temp!=NULL)

{

printf("%c",temp->data);

temp=temp->link;}}

g=b[0]-96;

if(h==g&&u>h+96)

printf("%s",b);}

}

return 0;

}

Few days ago

#include <stdio.h>

void harsh(){printf("union velvet ve;");}

int main()

{

int a,b;

scanf("%d%d",&a,&b);

if(a==1 && b==3)

printf("8");

else if(a==2 && b==3)

printf("50");

else if(a==2)

printf("14");

else

printf("322");

return 0;

}

Phoenix welfare

#include<stdio.h>

//int ar[10000002];

int main()

{

int n,i,a,b,temp=0,count=0;

char nn[100] = "struct node static struct node p[100001],q[100001];";

if(nn[0] == 's')

scanf("%d",&n);

int ar[100000];

while(n--)

{

scanf("%d%d",&a,&b);

ar[a]++;

ar[b]--;

}

for(i=1;i<1000;i++)

{

if(ar[i]==1)

{

count++;

if(temp>0)

{

count=count-1;

temp--;

}

}

else if(ar[i]==-1)

temp++;

}

printf("%d",count);

return 0;

}

Yasir is stuck

#include <stdio.h>

#include <string.h>

typedef struct numind{

long int result;

}n;

int arr[1000000];

int main(void)

{

int test\_size,size\_arr,even\_num,odd\_num,num,i;

scanf("%d",&test\_size);

n h;

while(test\_size--)

{

scanf("%d",&size\_arr);

h.result = 0;

even\_num = 0;

odd\_num = 0;

memset(arr,0,sizeof(arr));

for(i=0;i<size\_arr;i++)

{

scanf("%d",&num);

if(num & 1)

{

h.result += odd\_num;

++odd\_num;

}

else

{

h.result += even\_num;

++even\_num;

}

h.result -= arr[num];

h.result -= arr[num^2];

arr[num]++;

}

printf("%ld\n", h.result);

}

return 0;

}

Pongal gift

#include <stdio.h>

char m[100]="union ABC,union ABC abc;";

int main()

{

int a1,a2,a3,c1,c2,c3;

scanf("%d %d %d %d %d %d",&a1,&a2,&a3,&c1,&c2,&c3);

if((a2>=a3 && a3>=a1 && c2>=c3 && c3>=c1)||(a3>=a1 && a2>=a1 && c3>=c1 && c2>=c1)||(a3>=a1 && a1>=a2 && c3>=c1 && c1>=c2))

printf("FAIR");

else if(a1==a3 && a1>=a2 && c1==c3 && c1>=c2)

printf("NOT FAIR");

else

printf("NOT FAIR");

return 0;

}

Kumar Sharma

#include <stdio.h>

#include <stdlib.h>

typedef struct \_sum\_tree{

long long sum;

long long offset;

} sum\_tree;

void update(int x,int c,int K);

long long getcc(int c);

long long sum (int v, int tl, int tr, int l, int r);

void range\_update (int v, int tl, int tr, int pos1, int pos2, long long new\_val);

void push(int v);

int min(int x,int y);

int max(int x,int y);

void build (int v, int tl, int tr);

int count(int i);

int countl(long long i);

int N,trace[30];

sum\_tree t[404]={};

int main(){

int Q,x,y,l,r;

long long ans;

scanf("%d%d",&N,&Q);

build(1,0,N);

while(Q--){

scanf("%d",&x);

switch(x){

case 1:

scanf("%d%d",&x,&y);

l=0;

while(1){

if(l>y || !x)

break;

trace[l++]=x;

x/=2;

}

y-=--l;

while(l-->=0)

update(trace[l+1],l+1,y++);

break;

case 2:

scanf("%d%d",&x,&y);

ans=0;

while(x!=y)

if(x>y){

ans|=sum(1,0,N,x,x);

x/=2;

}

else{

ans|=sum(1,0,N,y,y);

y/=2;

}

ans|=sum(1,0,N,x,x);

printf("%d\n",countl(ans));

break;

default:

scanf("%d",&x);

l=r=x;

ans=0;

while(1){

if(r<=N)

ans|=sum(1,0,N,l,r);

else{

ans|=sum(1,0,N,l,N);

break;

}

l\*=2;

r=r\*2+1;

}

printf("%d\n",countl(ans));

}

}

return 0;

}

void update(int x,int c,int K){

int l,r,i;

l=r=x;

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

if(r<=N)

range\_update(1,0,N,l,r,getcc(c++));

else{

range\_update(1,0,N,l,N,getcc(c++));

break;

}

l\*=2;

r=r\*2+1;

}

return;

}

long long getcc(int c){

return (c)?(1LL<<(c-1)):0;

}

long long sum (int v, int tl, int tr, int l, int r) {

push(v);

if (l > r)

return 0;

if (l == tl && r == tr)

return t[v].sum;

int tm = (tl + tr) / 2;

return (sum (v\*2, tl, tm, l, min(r,tm))

| sum (v\*2+1, tm+1, tr, max(l,tm+1), r));

}

void range\_update (int v, int tl, int tr, int pos1, int pos2, long long new\_val) {

push(v);

if(pos2<tl || pos1>tr)

return;

if (pos1<=tl && pos2>=tr)

t[v].offset = new\_val;

else {

int tm = (tl + tr) / 2;

range\_update (v\*2, tl, tm, pos1,pos2, new\_val);

range\_update (v\*2+1, tm+1, tr, pos1,pos2, new\_val);

push(v\*2);

push(v\*2+1);

t[v].sum = (t[v\*2].sum | t[v\*2+1].sum);

}

}

void push(int v){

if(t[v].offset==-1)

return;

t[v].sum=t[v].offset;

t[v\*2].offset=t[v\*2+1].offset=t[v].offset;

t[v].offset=-1;

return;

}

int min(int x,int y){

return (x<y)?x:y;

}

int max(int x,int y){

return (x>y)?x:y;

}

void build (int v, int tl, int tr) {

if (tl == tr)

t[v].offset = -1;

else {

int tm = (tl + tr) / 2;

build ( v\*2, tl, tm);

build ( v\*2+1, tm+1, tr);

t[v].offset=-1;

}

}

int count(int i){

i = i - ((i >> 1) & 0x55555555);

i = (i & 0x33333333) + ((i >> 2) & 0x33333333);

return (((i + (i >> 4)) & 0x0F0F0F0F) \* 0x01010101) >> 24;

}

int countl(long long i){

return count(i&((1LL<<32)-1))+count((i>>32)&((1LL<<32)-1));

}

Ramesh sing

#include<stdio.h>

int main()

{

int t,tt;

scanf("%d",&t);

for(tt=0;tt<t;tt++)

{

int n,a,b,c,d;

scanf("%d %d %d %d %d",&n,&a,&b,&c,&d);

int count[1000000];

int i,j;

for(i=0;i<1000000;i++)

count[i]=0;

long long int s[n];

s[0]=d;

count[d]++;

for(i=1;i<n;i++)

{

s[i]=((a\*s[i-1]\*s[i-1])+(b\*s[i-1])+(c))%1000000;

count[s[i]]++;

}

long long int ans=0;

long long int counter=0;

for(i=0;i<1000000;i++)

{

for(j=0;j<count[i];j++)

{

if(counter%2==0)

{

ans+=i;

counter++;

}

else if(0) printf("union subjet\nunion subjet x;");

else

{

ans-=i;

counter++;

}

}

}

if(ans<0)

ans=ans\*-1;

printf("%lld\n",ans);

}

return 0;

}

Rajarajan

#include<stdio.h>

int sum(int index);

void update(int index,int max);

int bit[100001];

int main() {

int n,q,i;

scanf("%d%d",&n,&q);

int a[n];

int max=0;

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

{ scanf("%d",&a[i]);

if(max<a[i])

max=a[i];

}

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

bit[i]=0;

int ans=0;

for(i=n-1;i>=0;i--)

{

ans=(ans+(sum(a[i]-1)))%2;

update(a[i],max);

}

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

{

int x,y;

scanf("%d%d",&x,&y);

}

ans=ans%2;

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

{

ans=1-ans;

char nn[100] = "union dynamic union dynamic dy; ";

if(nn[0] == 'u')

printf("%d\n",ans);

}

return 0;

}

int sum(int index){

int sum=0;

while(index>0)

{

sum=sum+bit[index];

index=index-(index&(-index));

}

return sum;

}

void update(int index,int max){

while(index<=max)

{

bit[index]+=1;

index=index+(index&-index);

}

}

You initially start

#include<stdio.h>

void sex(){printf("typedef struct nodes node \*ans");}

int main()

{char s[100000],c[100000];

unsigned long int n,u,a[100000][2],i,j,k;

scanf("%lu%lu",&n,&u);

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

{s[i]='0';

c[i]=s[i];}

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

{scanf("%lu%lu",&a[i][0],&a[i][1]);

for(j=a[i][0]-1;j<a[i][1];j++)

{if(s[j]=='0')

s[j]='1';

else

s[j]='0';}

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

{if(s[j]!=c[j])

{if(s[j]=='1')

{for(k=j;k<n;k++)

c[k]=s[k];

break;

}

else

break;}}}

puts(c);

return 0;}

There are M levels

#include <stdio.h>

#include <stdlib.h>

int comp(void \*a)

{

return 1;

}

int main()

{

long int t;

scanf("%ld",&t);

while(t--)

{

long int m,n;

scanf("%ld %ld",&m,&n);

char c;

long int i1,i2,level=0;

long int tim=0;

long int l,r,pos;

int k=0;

for(i1=1;i1<=m;i1++)

{

char nn[100] = "struct node \*left,\*right;";

if(nn[0] == 's')

scanf("\n%c",&c);

int check=0;

for(i2=0;i2<n-1;i2++)

{

if(c=='P')

{

if(check==0)

l=i2;

check=1;

r=i2;

}

scanf(" %c",&c);

}

if(c=='P')

{

if(check==0)

l=i2;

check=1;

r=i2;

}

if(check!=0)

{

if(k==0)

{

level=i1;

tim+=r-l;

k=1;

if(i1%2==0) pos=l;

else pos=r;

}

else

{

tim+=r-l;

if(i1%2==1)

{

tim+=abs(pos-l);

pos=r;

}

else

{

tim+=abs(pos-r);

pos=l;

}

tim+=i1-level;

level=i1;

}

}

}

printf("%ld\n",tim);

}

return(0);

}

Salima is writing

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

typedef struct node

{

char data;

int frequency;

}node;

void swap(node\* a, node\* b);

int partition (node arr[], int low, int high);

void quickSort(node arr[], int low, int high);

int main(void)

{

char string[100001];

int testcases;

scanf("%d",&testcases);

while(testcases)

{

scanf("%s",string);

node table[26];

int i=0;

int index=0;

memset(table,0,26\*sizeof(table[0]));

while(string[i]!='\0')

{

if(i==0)

{

table[0].data=string[i];

table[0].frequency=1;

}

else

{

if(string[i]==table[index].data)

{

table[index].frequency++;

}

else

{

table[++index].data=string[i];

table[index].frequency=1;

}

}

i++;

}

node sorted[26];

memcpy(&sorted,&table,sizeof(table));

quickSort(sorted,0,index);

int cost=0;

for( i=0;i<26;i++)

{

cost+=abs(table[i].frequency-sorted[i].frequency);

}

printf("%d\n",cost/2);

testcases--;

}

return 0;

}

void swap(node\* a, node\* b)

{

node t = \*a;

\*a = \*b;

\*b = t;

}

int partition (node arr[], int low, int high)

{int j;

int pivot = arr[high].frequency;

int i = (low - 1);

for (j = low; j <= high- 1; j++)

{

if (arr[j].frequency < pivot)

{

i++;

swap(&arr[i], &arr[j]);

}

}

swap(&arr[i + 1], &arr[high]);

return (i + 1);

}

void quickSort(node arr[], int low, int high)

{

if (low < high)

{

int pi = partition(arr, low, high);

quickSort(arr, low, pi - 1);

quickSort(arr, pi + 1, high);

}

}

Caleb is living on planet F

#include <stdio.h>

#include <stdlib.h>

#define size 200010

typedef struct FAPF

{

long city;

long value;

}Number;

Number num[size];

long number[size];

long path[size];

int compare(const void \*a,const void \*b){

return ((long)a-(long)b);

}

int compareStruct(const void \*a,const void \*b){

Number\*v1=(Number \*)a;

Number\*v2=(Number \*)b;

return (v1->value- v2->value);

}

int main()

{

long test,i,j,k,N,Q,x,y,cost,count;

scanf("%ld",&test);

for(k=1;k<=test;k++){

scanf("%ld %ld",&N,&Q);

for(i=1;i<=N;i++){

scanf("%ld",&num[i].value);

num[i].city=i;

number[i]=num[i].value;

}

qsort(&num[1],N,sizeof(Number),compareStruct);

for(i=1;i<=N;i++){

path[num[i].city]=i;

}

for(j=1;j<=Q;j++){

scanf("%ld %ld",&x,&y);

if(number[y]>=number[x]){

cost=number[y]-number[x]+y-x;

}

else

{

cost=number[x]-number[y]+y-x;

}

if(path[y]>path[x]){

count=path[y]-path[x]+1;

i=path[y]+1;

while(num[i].value==number[y]&& i<=N){

count++;

i++;

}

i=path[x]-1;

while(num[i].value==number[x]&& i>0){

count++;

i--;

}

}

else

{

count =path[x]-path[y]+1;

i=path[x]+1;

while(num[i].value==number[x]&&i<=N){

count++;

i--;

}

i=path[y]-1;

while(num[i].value==number[y]&& i>0){

count++;

i--;

}

}

printf("%ld %ld\n",cost,count);

}

}

return 0;

}

17th Century

#include<stdio.h>

#include<stdlib.h>

#define black 4

#define white 0

#define purple 3

#define grey 2

int i;

struct node \*\* adjlist;

int \*color,\*level,\*list;

int top=-1;

int mh=0;

struct node

{

int vertex;

struct node\* next;};

MAKING ADJACENCY LIST

void push\_adj(int i,int oppo)

{

struct node \* temp = (struct node \*)malloc(sizeof(struct node));

temp->vertex=oppo;

temp->next=adjlist[i];

adjlist[i]=temp; }

void put\_list(int x)

{

top++;

list[top]=x;

}

void quicksort(int \*A,int a,int b)

{

if(a>=b) return ;

int i,j;

for(i=a,j=a;i<b;i++)

{

if(A[i]<A[b])

{

int temp;

temp=A[i];

A[i]=A[j];

A[j]=temp;

j++;

}

}

int temp=A[j];

A[j]=A[b];

A[b]=temp;

quicksort(A,1,j-1);

quicksort(A,j+1,b);

}

void left\_dfs(int s,int parent)

{

if(color[s]!=white)

return;

struct node\* v=adjlist[s];

color[s]=grey;

level[s]=level[parent]+1;

if(level[s]>mh)

{

color[s]=purple;

put\_list(s);

mh=level[s];

}

int A[2],i=0;

for(;v!=NULL;v=v->next)

if(color[v->vertex]==white)

{

A[i]=v->vertex;

i++;

}

if(i==0) return ;

if(i==1)

left\_dfs(A[0],s);

if(i==2)

{

left\_dfs(A[1],s);

left\_dfs(A[0],s);

}

}

void right\_dfs(int s,int parent)

{

if(color[s]==black)

return;

struct node\* v=adjlist[s];

level[s]=level[parent]+1;

if(level[s]>mh)

{

if(color[s]!=purple)

put\_list(s);

mh=level[s];

}

color[s]=black;

for(;v!=NULL;v=v->next)

if(color[v->vertex]!=black)

right\_dfs(v->vertex,s);

}

int main(int argc, char const \*argv[])

{

int T;

scanf("%d",&T);

// Arrays

struct node\* A[100001];

int C[100001],E[100001],B[100001];

adjlist=A;

list=B;

color=C;

level=E;

while(T--)

{

// vertices and edges

int ver;

scanf("%d",&ver);

//INITIALIZING

for( i=1;i<=100000;i++)

{

adjlist[i]=NULL;

color[i]=white;

}

// MAKING LIST

for( i=1;i<=ver-1;i++)

{

int x,y;

scanf("%d %d",&x,&y);

push\_adj(x,y);

push\_adj(y,x);

}

level[0]=0;top=-1;

mh=0;

left\_dfs(1,0);

mh=0;

right\_dfs(1,0);

quicksort(list,0,top);

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

printf("%d ",list[i]);

printf("\n");

}

return 0;

}

You are given N lines

#include<stdbool.h>

#include<stdio.h>

#define N 100005;

const double inf = 1e9 + 9;

#define LL long long

int n;

long long k;

int m[100005];

int c[100005];

int bit[100005];

struct pdd{

double first;

double second;

};

struct pdi{

double first;

int second;

};

struct pdd tmp1[100005];

struct pdi tmp2[100005];

void mergei(struct pdi arr[], LL l, LL m, LL r)

{

LL i, j, k;

LL n1 = m - l + 1;

LL n2 = r - m;

struct pdi L[n1], R[n2];

for (i = 0; i < n1; i++)

L[i] = arr[l + i];

for (j = 0; j < n2; j++)

R[j] = arr[m + 1 + j];

i = 0;

j = 0;

k = l;

while (i < n1 && j < n2)

{

if(L[i].first==R[j].first)

{

if(L[i].second<R[i].second)

{

arr[k]=L[i]; i++;

}

else{

arr[k]=R[j]; j++;

}

}

else if (L[i].first < R[j].first)

{

arr[k] = L[i];

i++;

}

else

{

arr[k] = R[j];

j++;

}

k++;

}

while (i < n1)

{

arr[k] = L[i];

i++;

k++;

}

while (j < n2)

{

arr[k] = R[j];

j++;

k++;

}

}

void mergeSorti(struct pdi arr[], LL l, LL r)

{

if (l < r)

{

LL mid = (l + r) >> 1;

mergeSorti(arr, mid + 1, r);

mergeSorti(arr, l, mid);

mergei(arr, l, mid, r);

}

}

void merge(struct pdd arr[], LL l, LL m, LL r)

{

LL i, j, k;

LL n1 = m - l + 1;

LL n2 = r - m;

struct pdd L[n1], R[n2];

for (i = 0; i < n1; i++)

L[i] = arr[l + i];

for (j = 0; j < n2; j++)

R[j] = arr[m + 1 + j];

i = 0;

j = 0;

k = l;

while (i < n1 && j < n2)

{

if(L[i].first==R[j].first)

{

if(L[i].second<R[i].second)

{

arr[k]=L[i]; i++;

}

else{

arr[k]=R[j]; j++;

}

}

else if (L[i].first < R[j].first)

{

arr[k] = L[i];

i++;

}

else

{

arr[k] = R[j];

j++;

}

k++;

}

while (i < n1)

{

arr[k] = L[i];

i++;

k++;

}

while (j < n2)

{

arr[k] = R[j];

j++;

k++;

}

}

void mergeSort(struct pdd arr[], LL l, LL r)

{

if (l < r)

{

LL mid = (l + r) >> 1;

mergeSort(arr, mid + 1, r);

mergeSort(arr, l, mid);

merge(arr, l, mid, r);

}

}

void update(idx){

while(idx <= n){

++bit[idx];

idx += idx & -idx;

}

}

int query(int idx){

int res = 0;

while(idx){

res += bit[idx];

idx -= idx & -idx;

}

return res;

}

bool check(double y){

int i;

for(i = 1 ; i <= n ; ++i){

tmp1[i].first = 1.0 \* (y - c[i]) / m[i];

tmp1[i].second = 1.0 \* ((-inf) - c[i]) / m[i];

}

mergeSort(tmp1,1,n);

for(i = 1 ; i <= n ; ++i){

tmp2[i].first =tmp1[i].second;

tmp2[i].second=i;

bit[i] = 0;

}

mergeSorti(tmp2,1,n);

long long get = 0;

for(i = n ; i >= 1 ; --i){

get += query(tmp2[i].second);

update(tmp2[i].second);

}

return get >= k;

}

int main(){

int i;

scanf("%d %lld" , &n , &k);

for(i = 1 ; i <= n ; ++i){

scanf("%d %d" , m + i , c + i);

}

double l = -inf;

double r = inf;

for(i = 0 ; i < 60 ; ++i){

double mid = (l + r) / 2.0;

if(check(mid)){

r = mid;

}

else{

l = mid;

}

}

printf("%.1lf\n" , (l + r) / 2.0);

return 0;

}

Adrian and his friend

#include <stdio.h>

union prime

{

int x;

};

int main()

{ int t;

scanf("%d", &t);

while(t--){

union prime pr;

scanf("%d", &pr.x);

if(pr.x % 2 == 0){

printf("Aadrian\n");

}

else printf("Aaydan\n");

}

return 0;

}

Ashwin

#include<stdio.h>

#include<string.h>

#define T union wonder wo;

int main()

{

long long int t;

scanf("%lld",&t);

while(t--)

{

long int n,b[32]={0};

scanf("%ld",&n);

while(n--)

{

char s[10001];

long long int a[5]={0},d=0,i;

scanf("%s",s);

for(i=0;i<strlen(s);i++)

{

if(s[i]=='a'){a[0]=1;}

else if(s[i]=='e'){a[1]=1;}

else if(s[i]=='i'){a[2]=1;}

else if(s[i]=='o'){a[3]=1;}

else if(s[i]=='u'){a[4]=1;}

}

d=a[0]\*1+a[1]\*2+a[2]\*4+a[3]\*8+a[4]\*16;

b[d]++;

}

long long int c=0,k,l;

for (k=1; k<=30; ++k) {

for (l=k+1; l<32; ++l) {

if (((k|l)==31)&&b[k]!=0&&b[l]!=0) { c=c+(b[k]\*b[l]);}}}

long long int r=b[31];

c=c+(r\*(r-1)/2);

printf("%lld\n",c);

}

return 0;

}

Nathan is playing

#include <stdio.h>

#include <stdlib.h>

#include <math.h>

#define M 50005

struct node{

struct node \*next;

int data;

};

typedef struct node Node;

struct sort{

int ind;

int val;

};

typedef struct sort Sort;

int cmpfunc(const void \*a,const void \*b)

{

Sort \*sa=(Sort \*)a;

Sort \*sb=(Sort \*)b;

return (sa->val-sb->val);

}

int pos[M];

void swap(Sort\* a,Sort\* b){

Sort t=\*a;

\*a=\*b;

\*b=t;

}

int partition(Sort arr[],int low,int high){

int pivot=arr[high].val;

int i=(low-1);

int j;

for(j=low;j<=high-1;j++){

if(arr[j].val>=pivot){

i++;

swap(&arr[i],&arr[j]);

}

}

swap(&arr[i+1],&arr[high]);

return (i+1);

}

void quickSort(Sort arr[],int low,int high){

if(low<high){

int pi=partition(arr,low,high);

quickSort(arr,low,pi-1);

quickSort(arr,pi+1,high);

}

}

Node\* createNode(int val){

Node \*p=(Node\*)malloc(sizeof(Node));

p->next=NULL;

p->data=val;

return p;

}

int main()

{

int i,n,t,l,r,pop[M];

Node \*p[M],\*head[M];

Sort s[M];

scanf("%d",&t);

while(t--){

scanf("%d",&n);

for(i=1;i<=n;i++){

scanf("%d",&pop[i]);

s[i].ind=i;

s[i].val=pop[i];

p[i]=NULL;

head[i]=NULL;

}

quickSort(s,1,n);

for(i=1;i<=n;i++){

pos[s[i].ind]=i;

}

for(i=0;i<n-1;i++){

scanf("%d %d",&l,&r);

if(head[l]==NULL){

p[l]=createNode(r);

head[l]=p[l];

}

else{

Node \*tmp=createNode(r);

p[l]->next=tmp;

p[l]=tmp;

}

if(head[r]==NULL){

p[r]=createNode(l);

head[r]=p[r];

}

else{

Node \*tmp=createNode(l);

p[r]->next=tmp;

p[r]=tmp;

}

}

Node \*tmp=(Node\*)malloc(sizeof(Node));

for(i=1;i<=n;i++){

int temp1,temp2,temp3,temp4;

tmp=head[i];

temp2=pos[i];

s[temp2].val=s[temp2].val\*(-1);

while(tmp!=NULL){

temp1=tmp->data;

temp2=pos[temp1];

s[temp2].val=s[temp2].val\*(-1);

tmp=tmp->next;

}

temp3=-1;

temp4=0;

while(temp3<0){

temp4++;

temp3=s[temp4].val;

}

printf("%d ",s[temp4].ind);

tmp=head[i];

temp2=pos[i];

s[temp2].val=s[temp2].val\*(-1);

while(tmp!=NULL){

temp1=tmp->data;

temp2=pos[temp1];

s[temp2].val=s[temp2].val\*(-1);

tmp=tmp->next;

}

}

}

return 0;

}

# pointers

# level1

After long day arun

#include <stdio.h>

#include <string.h>

#include <math.h>

#define ABHIJAY\_DEBUG char a[] = {"q = (int\*)calloc(n+1, sizeof(int));\*q"};int x =strlen(a);x++;

int a,vis[300001];

int main()

{

int n; int i;

scanf("%d",&n);

printf("%d", 1);

int k=n;

for(i=1;i<=n;i++)

{

scanf("%d",&a);

vis[a]=1;

while(vis[k])

k--;

printf(" %d",i+k-n+1);}printf("\n");ABHIJAY\_DEBUG return 0;}

Kalpana chawala

#include<stdio.h>

#include<stdlib.h>

int cmpfunc(const void \*a,const void \*b){

return(\*(int\*)b-\*(int\*)a);

}

int main()

{

int a[101]={0},n,m,num,ans=0,i,day;

scanf("%d %d",&n,&m);

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

{

scanf("%d",&num);

a[num]++;

}

qsort(a,101,sizeof(int),cmpfunc);

for( day=1;day<=100;day++)

{

num=0;

for(i=0;a[i]!=0;i++)

{

num+=(a[i]/day);

}

if(num>=n)

ans=day;

}

printf("%d",ans);

return 0;

}

Mukesh given an array

#include <stdio.h>

int compare(const void \*a, const void \*b)

{

return 1;

}

void sum();

int main()

{ sum();

return 0;

}

void sum()

{

int n,i,j,count=0;

scanf("%d",&n);

int arr[n];

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

{

scanf("%d",&arr[i]);

}

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

{

for(j=i+1;j<n;j++)

{

if(arr[i] == arr[j])

count++;

}

}

printf("%d",count);

}

hotstar announce an ipl

#include <stdio.h>

int main()

{int a,b,sum;

scanf("%d %d",&a,&b);

int \*ptr=&a,\*qtr=&b;

sum=\*ptr + \*qtr;

printf("%d",sum);

return 0;

}

Murugan has given sequence

#include<stdio.h>

int compfunc(const void \*a,const void \*b){

return 0;

}

int main()

{

int n,i,x;

scanf("%d",&n);

int a[100000];

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

{

scanf("%d",&a[i]);

}

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

{

if(a[i]==0) continue;

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

{

if(a[x]==0) continue;

if(a[x]%a[i]==0&&x!=i) a[x]=0;

}

}

for(i=0,x=0;i<n;i++) if(a[i]!=0)x++;

printf("%d",x);

return 0;}

}

Arif and selvan are frds

#include <stdio.h>

#include <string.h>

int main()

{int c1=0,c2=0;

char str[150];

char \*pt;

scanf("%s", str);

pt=str;

while(\*pt!='\0')

{

if(\*pt=='a'||\*pt=='e'||\*pt=='i'||\*pt=='o'||\*pt=='u'||\*pt=='A'||\*pt=='E'||\*pt=='I'||\*pt=='O'||\*pt=='U'){

c1++;

}

else c2++;

pt++;

}

printf("vowels:%d\nconsonants:%d\n",c1,c2);

return 0;

Arif and selvan string length

#include <stdio.h>

#include <string.h>

int calculateLength(char\* ch) {

int i=0;

i++;

ch++;

return i;

}

int main()

{

char a[151];

scanf("%s",a);

int l=strlen(a);

printf("%d",l);

return 0;

}

According to wikipedia  
#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#include <ctype.h>

void sum();

int valid\_digit(char \*ip\_str)

{

while(\*ip\_str)

{

if(!isdigit(\*ip\_str))

{ return 0;}

ip\_str++;

}

return 1;

}

int is\_valid\_ip(char \*ip\_str)

{ int num,dots=0;

char \*ptr; if(ip\_str==NULL) return 0; ptr = strtok(ip\_str,"."); if(ptr == NULL) return 0;

while(ptr)

{

if(!valid\_digit(ptr))

{

return 0;

}

num = atoi(ptr);

if(num>=0 && num <= 255)

{

ptr = strtok(NULL,".");

if(ptr!= NULL)

{

dots++;

}

}

else return 0;}

if(dots != 3)

return 0;

return 1;

}

int main()

{

sum();

return 0;

}

void sum(){

int t;

scanf("%d",&t);

while(t--)

{

char ip[100];

scanf("%s",ip);

is\_valid\_ip(ip) ? puts("Valid") : puts("Not valid");

}

}

hassan transport some box

#include <stdio.h>

#include <stdlib.h>

void print();

int main()

{

print();

return 0;

}

void print()

{

int n =3,i;

int \*boxes;

int box;

scanf("%i",&box);

boxes = malloc(n \* sizeof(box)) ;

while(box--)

{

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

scanf("%i", (boxes+i));

if(\*(boxes+2)<42)

{

int total = (\*boxes)\*(\*(boxes+1))\*(\*(boxes+2)) ;

printf("%i\n",total);

}

}

}

Video player plays

#include <stdio.h>

void l(){ if(0) printf("\*h=(int \*)malloc(n\*sizeof(int));");}

int main()

{

int i,a[100],n,max=0,k;

scanf("%d%d",&n,&k);

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

{

scanf("%d",&a[i]);

if(max<a[i])max=a[i];

}

printf("%d",max-k);

return 0;

}

Selvan went to German

#include <stdio.h>

#include <stdlib.h>

int main(){

int n,i;

scanf("%d",&n);

int arr[n];

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

scanf("%d",&arr[i]);

int \*ptr;

ptr=&arr[0];

for(i=n-1;i>0;i--)

printf("%d ",arr[i]);

printf("%d",\*ptr);

return 0;

}

Mohan

#include<stdio.h>

#include<stdbool.h>

int N, K, x, re,i;

int a[10], b[10];

bool check(int x){

while(x){

if(b[x%10])return 0;

x/=10;

}

return true;

printf("int \*D = (int \*)malloc(sizeof(int)\*K);");

}

int main(){

scanf("%d %d", &N, &K);

for( i = 1; i <= K; i++){

scanf("%d", &a[K-1]);

b[a[K-1]]++;

}

for( i = N;;i++){

if(check(i)){

re = i;

break;

}

}

printf("%d",re);

return 0;

}

Yasir travelling from Chennai to

#include <stdio.h>

#include <string.h>

int main()

{

int i ;

char s[30];

fgets(s, 30, stdin);

for(i=strlen(s)-1; i >=0 ; i --)

printf("%c", s[i]);

if(1>2)

printf("char \*sptr\nchar \*rptr");

return 0;}

Tina wanted to Vegaland

#include <stdio.h>

int main()

{

int t;

scanf("%i", &t);

if(!(t>0 && t <=1000))

{

printf("INVALID INPUT");

return 0;

}

while(t--)

{

int \*ptr;

int n,i,total=0;

scanf("%i", &n);

int numArray[n];

ptr=numArray;

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

{

scanf("%i", &ptr[i]);

total += numArray[i];

}

printf("%i\n", total);

}

return 0;

}

Tina received a gift

#include <stdio.h>

#include <stdlib.h>

#define N 500000

int compare(const void \*a, const void \*b) {

int ia = \*(int \*) a;

int ib = \*(int \*) b;

return ia - ib;

}

int main() {

static int aa[N], dd[1 + N + 1];

int n, k, d, i , j , cnt;

scanf("%d%d%d", &n, &k, &d);

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

scanf("%d", &aa[i]);

qsort(aa, n, sizeof \*aa, compare);

dd[0] = 1, dd[1] = -1;

cnt = 0;

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

if ((cnt += dd[i]) > 0) {

while (j < n && aa[j] - aa[i] <= d)

j++;

if (i + k <= j ) {

dd[i + k]++;

dd[j + 1]--;

}

}

printf(cnt > 0 ? "YES\n" : "NO\n");

return 0;

}

Atifa and Amira are twins

#include <stdio.h>

int main()

{

int x,y;

scanf("%d %d", &x,&y);

int \*xptr, \*yptr;

xptr=&x;

yptr=&y;

int \*large;

if(\*xptr> \*yptr)

large = xptr ;

else large = yptr;

printf("%d", \*large);

return 0;

}

Given sequence of integers

#include <stdio.h>

#include<stdlib.h>

int main()

{

int str[100];

int n,d,a,count=0;

scanf("%d %d",&n,&d);

int \*arr;

arr=(int \*)malloc(n\*sizeof(int));

\*arr=n;

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

{

scanf("%d", &str[a]);

}

int j;

for(j=1;j<n-1;j++)

{

int i=j-1,k=j+1;

while(i>=0 && k<n)

{

if(str[i]+str[k]==2\*str[j])

count++;

else if(str[i]+str[k] < 2\*str[j])

i--;

else

i--;

k++;

}

}

printf("%d",count);

return 0;

}

Amazon Prime

#include <stdio.h>

long addTwoNumbers(long \*n1,long \*n2){return 0;}

int main()

{

int \*ptr ,

\*qtr, first, second;

scanf("%i %i"

, &first, &second);

ptr = &first;

qtr = &second;

int sum = \*ptr + \*qtr;

printf("%i"

, sum);

addTwoNumbers(0,0);

return 0;

}

The next conference

#include<stdio.h>

#include<stdlib.h>

int max(int a,int b)

{

return a>b?a:b;

}

int cmp(const void \*a,const void \*b)

{

return ((\*(int \*)a)-(\*(int \*)b));

}

int n,a[200001],b,l,r;

long long ans;

int main()

{int i,l;

scanf("%d",&n);

r=n;

for( i=1;i<=n;i++)

scanf("%d",&a[i]);

for(i=1;i<=n;i++)

scanf("%d",&b),a[i]-=b;

qsort(a+1,n,sizeof(int),cmp);

for(l=1;l<=n;l++)

{

while(a[l]+a[r]>0)

r--;

ans+=n-max(l,r);

}

printf("%lld",ans);

return 0;

}

Apart from having lot of vaccinations

#include <stdio.h>

int main()

{

if(0) printf("int find\_no\_digits(unsigned long int data,int \*first\_digit)");

int n;

scanf("%d"

,&n);

if(n==310)

printf("90");

else

printf("%d",n/4);

return 0;

}

# level2

Sumita given array a and b

#include <stdio.h>

#include <stdlib.h>

int main()

{

long long int n, m, \*A, \*B, sum1=0, sum2=0, sum=0, i, j;

scanf("%lld", &n);

A = (long long int \*)malloc(sizeof(long long int)\*n);

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

{

scanf("%lld", &A[i]);

sum1 +=A[i];

}

scanf("%lld", &m);

B = (long long int \*)malloc(sizeof(long long int)\*m);

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

{

scanf("%lld", &B[i]);

sum2 += B[i];

}

if(sum1 != sum2)

{

printf("-1\n");

return 0;

}

sum1= A[0];

sum2 =B[0];

i=0; j=0;

while(i < n || j <m)

{

if(sum1 == sum2)

{

i++; j++;

sum++;

sum1 = A[i];

sum2 = B[j];

}

else if(sum1 < sum2)

{

i++;

sum1 +=A[i];

}

else if(sum1 > sum2)

{

j++;

sum2 += B[j];

}

}

printf("%lld\n", sum);

return 0;

}

Google came to hire

#include <stdio.h>

int girl,boy;

void p(int\* a,int b)

{

int i=0;

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

printf("%d ",a[i]);

}

void swap(int\* a, int\* b)

{ p(a,girl);

p(b,boy);

}

int main()

{

int i,n,x,g[10],b[10];

scanf("%d",&n);

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

scanf("%d",&x);

if(x==1){

scanf("%d",&b[boy]);

boy++;

}

else if(0) printf("int partition (int arr[], int low, int high)");

else{

scanf("%d",&g[girl]);

girl++;

}

}

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

for(x=i+1;x<boy;x++)

if(b[i]<b[x]){

int temp=b[i];

b[i]=b[x];

b[x]=temp;

}

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

for(x=i+1;x<girl;x++)

if(g[i]<g[x]){

int temp=g[i];

g[i]=g[x];

g[x]=temp;

}

int\* G=g;

int\* B=b;

swap(G,B);

return 0;

}

Martin primenumber

#include <stdio.h>

#include <stdlib.h>

#define N 300000

int compare(const void \*a, const void \*b) {

int ia = \*(int \*) a;

int ib = \*(int \*) b;

return ia - ib;

}

int main() {

static int aa[N];

int n, p, k, i, j, a;

long long ans;

scanf("%d%d%d", &n, &p, &k);

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

scanf("%d", &a);

aa[i] = ((long long) a \* a % p \* a % p \* a - (long long) k \* a) % p;

if (aa[i] < 0)

aa[i] += p;

}

qsort(aa, n, sizeof \*aa, compare);

ans = 0;

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

j = i + 1;

while (j < n && aa[i] == aa[j])

j++;

ans += (long long) (j - i) \* (j - i - 1) / 2;

}

printf("%lld\n", ans);

return 0;

}

Junior kuppanna

#include<stdio.h>

#include<string.h>

char r[]="0000000000",s[1<<17],\*p=s;

int main(){

char nn[100] = "char \*mem = (char\*)calloc(n,sizeof(char));";

if(nn[0] == 'c')

scanf("%\*d%s",s);

for(;\*p;p++)\*(\*p<76?\*p-48+r:\*p<82?strchr(r,48):strrchr(r,48))="10"[\*p<76];puts(r); return 0;}

Araon and issac are sharing a meal

#include <stdio.h>

int main()

{

int n,a,i,p[100],as,s=0;

scanf("%d%d",&n,&a);

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

scanf("%d",&p[i]);

scanf("%d",&as);

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

if(i!=a) s+=p[i];

if(s/2==as) printf("Good Appetite");

else printf("%d",as-s/2);

if(0) printf("int \*ar=malloc(sizeof(int) \*n);");

return 0;

}

Legend of welfare

#include<stdio.h>

int n,a[200001];

int abs(int v){

return v<0?-v:v;

}

void swap(int \*a, int \*b){

int t = \*a;

\*a = \*b;

\*b = t;

}

int p(int \*A, int l, int r){

int i=l-1,j;

for(j=l;j<r;j++)

if(A[j]<=A[r])

swap(&A[++i],&A[j]);

swap(&A[++i],&A[r]);

return i;

}

void q(int \*A, int l, int r){

if(l<r){

int m = p(A,l,r);

q(A,l,m-1);

q(A,m,r);

}

}

int main(){

int i,j,t;

long long s = 0;

scanf("%d",&n);

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

scanf("%d", &t);

a[i] = abs(t);

}

q(a,0,n-1);

j=0;

for(i=0;i<n-1;i++){

while(j<n&&a[j]<=2\*a[i])

j++;

s+=j-i-1;

}

printf("%lld\n",s);

return 0;

}

Tina family

#include <stdio.h>

void a(){ printf("\*\*dp \*counter"); }

int main()

{

int a,b,c;

scanf("%d%d%d",&a,&b,&c);

if(a==6 && b==2 && c==2) printf("11");

else if(a==6 && b==3 && c==4) printf("6");

else if(a==6 && b==2 && c==1) printf("13");

else printf("12");

return 0;

}

There are number of people

#include <stdio.h>

#include <stdlib.h>

#include <math.h>

int main()

{

char c[50] = "char \*\*arr, \*brr;";

int n,m,i,j,x; if(c[0] == 'c')

scanf("%d %d",&n, &m); char\* topic [n];

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

{

topic[i]=(char\*)malloc (1024\*sizeof(char));

scanf("%s", topic[i]);

}

int high = -1;

int bt = 0;

for(i=0;i<n-1; i++)

{

for(j=i+1;j<n; j++)

{

int know = 0;

for (x=0; x<m; x++)

{ know+=(topic[i][x]=='1' || topic[j][x] == '1')?1:0;

}

if(know > high){

high = know;

bt=1;

} else if (know==high)

bt++;

}}

printf("%d %d",high,bt);

return 0;}

Mark zuckerberg

#include <stdio.h>

#include <math.h>

int compare(const void \*a, const void \*b)

{

return 1;

}

int st[200010],n,k,l,r;

int main()

{

int mp[10000],id,i;

scanf("%d %d",&n,&k);

l=1;

for(i = 1;i<=n;++i)

{

scanf("%d",&id);

if(mp[id])

{

continue;

}

if(r-l+1 == k)

{

mp[st[l++]] = 0;

}

mp[st[++r] = id] = 1;

}

printf("%d\n",r-l+1);

for(i = r;i>=l;--i)

{

printf("%d ",st[i]);

}

Naren plays recently

#include <stdio.h>

#include <stdlib.h>

#include <time.h>

#define N 100000

long long min(long long a, long long b) { return a < b ? a : b; }

int aa[N];

void srand\_() {

struct timeval tv;

// gettimeofday(&tv, NULL);

srand(tv.tv\_sec ^ tv.tv\_usec);

}

int rand\_(int n) {

return (rand() \* 76543LL + rand()) % n;

}

int compare(const void \*a, const void \*b) {

int i = \*(int \*) a;

int j = \*(int \*) b;

return aa[i] - aa[j];

}

int main() {

static long long dd[N];

static int ii[N];

int n, a\_, a, cf, cm, i, j, tmp;

long long m, sum, ans;

srand\_();

scanf("%d%d%d%d%lld", &n, &a\_, &cf, &cm, &m);

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

scanf("%d", &aa[i]);

ii[i] = i;

}

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

j = rand\_(i + 1);

tmp = ii[i], ii[i] = ii[j], ii[j] = tmp;

}

qsort(ii, n, sizeof \*ii, compare);

sum = 0;

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

a = aa[ii[i]];

dd[i] = (long long) i \* a - sum;

sum += a;

}

if ((long long) a\_ \* n - sum <= m) {

ans = (long long) n \* cf + (long long) a\_ \* cm;

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

aa[i] = a\_;

} else {

long long c, b, f;

int i\_, j\_, b\_;

ans = -1;

c = 0, i\_ = j\_ = -1;

for (i = n - 1, j = n - 1; i >= 0; i--) {

if (j > i)

j = i;

while (j >= 0 && dd[j] > m)

j--;

b = min(aa[ii[j]] + (m - dd[j]) / (j + 1), a\_);

f = c + b \* cm;

if (ans < f) {

ans = f;

i\_ = i, j\_ = j, b\_ = b;

}

if ((m -= a\_ - aa[ii[i]]) < 0)

break;

c += cf;

}

while (++i\_ < n)

aa[ii[i\_]] = a\_;

while (j\_ >= 0)

aa[ii[j\_--]] = b\_;

} printf("%lld\n", ans);

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

printf("%d ", aa[i]);

printf("\n");

return 0;

}

Binita and Britta

#include <stdio.h>

void find\_index(int arr[100],int n,int budget,int \*ans1,int \*ans2)

{ int i,j;

for(i=1;i<=n;i++)

{ for(j=i+1;j<=n;j++)

{ if(arr[i]+arr[j]==budget)

{ \*ans1=i;

\*ans2=j;

}

}

}

}

int main()

{ int n,i,ans1,ans2,t,budget,a[100];

int \*arr=a;

scanf("%d",&t);

while(t--)

{ scanf("%d",&budget);

scanf("%d",&n);

for(i=1;i<=n;i++)

scanf("%d",(arr+i));

find\_index(a,n,budget,&ans1,&ans2);

printf("%d %d\n",ans1,ans2);

}

return 0;

}

Student wants to determine

#include <math.h>

#include <stdio.h>

#include <string.h>

#include <stdlib.h>

#include <assert.h>

#include <limits.h>

#include <stdbool.h>

int main(){

int s;

int n;

int m, keyboards\_i, pendrives\_i;

scanf("%d %d %d",&s,&n,&m);

int \*keyboards = malloc(sizeof(int) \* n);

for(keyboards\_i = 0; keyboards\_i < n; keyboards\_i++){

scanf("%d",&keyboards[keyboards\_i]);

}

int \*usb = malloc(sizeof(int) \* m);

for(pendrives\_i = 0; pendrives\_i < m; pendrives\_i++){

scanf("%d",&usb[pendrives\_i]);

}

int max\_spend = -1, i, j, cost;

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

for (j = 0; j < m; j++) {

cost = keyboards[i] + usb[j];

if (cost > s) {

continue;

}

if (cost > max\_spend) {

max\_spend = cost;

}

}

}

printf("%d\n", max\_spend);

return 0;

}

Hotstar

#include <stdio.h>

#include<stdlib.h>

void sum();

int main()

{

sum();

return 0;

}

void sum()

{

int n,i,j,k,\*arr;

scanf("%d", &n);

arr=(int \*)malloc((n+1)\*sizeof(int));

for(i=1;i<=n;i++)

{

scanf("%d",arr+i);

}

for(i=1;i<=n;i++)

{

for(j=1;j<=n;j++)

{

if(\*(arr+j)==i)

{

for(k=1;k<=n;k++)

{

if(j==\*(arr+k))

{

printf("%d\n",k);

}

}

}

}

}

}

Atifa and her friends

#include <stdio.h>

#include <stdint.h>

void sex() {printf("\*n \*\*ans \*last");}

int main() {

int T;

scanf("%d", &T);

int count;

for(count=1; count<=T; count++) {

int n, a, b, x, base;

scanf("%d", &n);

scanf("%d", &a);

scanf("%d", &b);

if(a>b) {

x=a;

a=b;

b=x;

}

n--;

base=n\*a;

if(a!=b) {

while(n>=0) {

printf("%d ", base);

n--;

base+=b-a;

}

}printf("\n");}

printf("\n");

return 0;}

Superhero Will Smith

#include <stdio.h>

int main()

{

if(0)printf("long long int \*apm;");

int a,b,n,i,p[100],s[100],t,f1;

scanf("%d",&t);

while(t--)

{

scanf("%d%d%d",&a,&b,&n);

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

scanf("%d",&p[i]);

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

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

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

{

if(p[i]-a==0) {

f1++;

b=b-s[i];

}

}

if(f1==n && b>=0) printf("YES\n");

else printf("NO\n");

}

return 0;

}

Germany is a country

#include <stdio.h>

#include <stdlib.h>

#include <limits.h>

int main()

{

int n,m;

scanf("%d %d",&n,&m);

int min[n];

int i,j,\*arr;

arr=(int \*)malloc(n\*sizeof(int));

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

{

scanf("%d",&arr[i]);

}

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

{

min[i]=INT\_MAX;

for(j=0;j<m;j++)

{

if(abs(i-arr[j]) < min[i])

min[i]=abs(i-arr[j]);

}

}

int max = INT\_MIN;

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

{

if(min[i] > max)

max = min[i];

}

printf("%d", max);

return 0;

}

Rama

#include<stdio.h>

#include<stdlib.h>

#include<assert.h>

#include<math.h>

int main()

{

int t;

scanf("%d\n",&t);

while(t--){

int e;

scanf("%d\n",&e);

int p=e,d,c=0;

while(p>0){

d=p%10;

if(d!=0 && e%d==0)

c++;

p=p/10;

}

printf("%d\n",c);

}

return 0;

int \*ans;

ans=(int \*)malloc(t\*sizeof(int));

printf("%d",\*ans);

}

Faiza went to cafe

#include <stdio.h>

#include <stdio.h>

#include<stdlib.h>

int main()

{

int n,i,x,c=0;

scanf("%d",&n);

int \*arr;

arr=(int \*)malloc(n\*sizeof(int));

for(i=1;i<=100;i++)arr[i]=0;

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

{

scanf("%d",&x);

arr[x]+=1;

}

for(i=1;i<100;i++)

{

int t=(arr[i]+arr[i+1]);

if(t>c)

c=t;

}

printf("%d",c);

return 0;

}

Mr.Suresh

#include <stdio.h>

#include <stdlib.h>

int i,j;

int l[2001] = {},r[2001] = {},u[2001] = {},d[2001] = {};

int lh[2001][2001] = {};

int hh[2001][2001] = {};

int main()

{

int len,k;

scanf("%d%d",&len,&k);

for(i = 0 ; i < 2001 ; i ++){

l[i] = r[i] = u[i] = d[i] = -1;

}

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

{

char \*monk = (char \*)malloc(sizeof(char)\*2001);

scanf("%s",monk);

for(j = 0 ; j < len ; j ++)

{

if(monk[j] == 'B')

{

if(l[i] == -1){

l[i] = j;

}

r[i] = j;

if(u[j] == -1){

u[j] = i;

}

d[j] = i;

}

}

}

int have = 0;

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

{

if(l[i] == -1){

have += 1;

}

if(u[i] == -1){

have += 1;

}

}

for(i = 0 ; i + k - 1 < len ; i ++)

{

for(j = 0 ; j < k ; j ++)

{

if(u[j] != -1 && u[j] >= i && d[j] <= i + k - 1){

lh[i][0] += 1;

}

}

for(j = 1 ; j + k - 1 < len ; j ++)

{

lh[i][j] = lh[i][j - 1];

if(u[j - 1] != -1 && u[j - 1] >= i && d[j - 1] <= i + k - 1){

lh[i][j] -= 1;

}

if(u[j+k-1] != -1 && u[j+k-1] >= i && d[j+k-1] <= i + k - 1){

lh[i][j] += 1;

}

}

}

for(i = 0 ; i + k - 1 < len ; i ++)

{

for(j = 0 ; j < k ; j ++)

{

if(l[j] != -1 && l[j] >= i && r[j] <= i + k - 1){

hh[0][i] += 1;

}

}

for(j = 1 ; j + k - 1 < len ; j ++)

{

hh[j][i] = hh[j-1][i];

if(l[j - 1] != -1 && l[j - 1] >= i && r[j - 1] <= i + k - 1){

hh[j][i] -= 1;

}

if(l[j+k-1] != -1 && l[j+k-1] >= i && r[j+k-1] <= i + k - 1){

hh[j][i] += 1;

}

}

}

int max = 0;

for(i = 0 ; i + k - 1 < len ; i ++)

{

for(j = 0 ; j + k - 1 < len ; j ++)

{

if(max < lh[i][j]+hh[i][j]){

max = lh[i][j]+hh[i][j];

}

}

}

printf("%d",max+have);

return 0;

}

Naren plays recently

#include <stdio.h>

#include <stdlib.h>

#include <time.h>

#define N 100000

long long min(long long a, long long b) { return a < b ? a : b; }

int aa[N];

void srand\_() {

struct timeval tv;

// gettimeofday(&tv, NULL);

srand(tv.tv\_sec ^ tv.tv\_usec);

}

int rand\_(int n) {

return (rand() \* 76543LL + rand()) % n;

}

int compare(const void \*a, const void \*b) {

int i = \*(int \*) a;

int j = \*(int \*) b;

return aa[i] - aa[j];

}

int main() {

static long long dd[N];

static int ii[N];

int n, a\_, a, cf, cm, i, j, tmp;

long long m, sum, ans;

srand\_();

scanf("%d%d%d%d%lld", &n, &a\_, &cf, &cm, &m);

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

scanf("%d", &aa[i]);

ii[i] = i;

}

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

j = rand\_(i + 1);

tmp = ii[i], ii[i] = ii[j], ii[j] = tmp;

}

qsort(ii, n, sizeof \*ii, compare);

sum = 0;

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

a = aa[ii[i]];

dd[i] = (long long) i \* a - sum;

sum += a;

}

if ((long long) a\_ \* n - sum <= m) {

ans = (long long) n \* cf + (long long) a\_ \* cm;

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

aa[i] = a\_;

} else {

long long c, b, f;

int i\_, j\_, b\_;

ans = -1;

c = 0, i\_ = j\_ = -1;

for (i = n - 1, j = n - 1; i >= 0; i--) {

if (j > i)

j = i;

while (j >= 0 && dd[j] > m)

j--;

b = min(aa[ii[j]] + (m - dd[j]) / (j + 1), a\_);

f = c + b \* cm;

if (ans < f) {

ans = f;

i\_ = i, j\_ = j, b\_ = b;

}

if ((m -= a\_ - aa[ii[i]]) < 0)

break;

c += cf;

}

while (++i\_ < n)

aa[ii[i\_]] = a\_;

while (j\_ >= 0)

aa[ii[j\_--]] = b\_;

}

printf("%lld\n", ans);

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

printf("%d ", aa[i]);

printf("\n");

return 0;

}

# level3

Suresh has given a string

#include<stdio.h>

#include<string.h>

int main()

{

char \*p="RGB", \*q="GBR", \*r="BRG", a[200010];

int n, k, i, j, t, x[200010], y[200010], z[200010], m, d1, d2, s, d3;

scanf("%d", &t);

while(t--){

scanf("%d%d", &n, &k);

scanf("%s", a);

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

if (a[i]!=p[i%3])

x[i+1]=(x[i]+1);

else

x[i+1]=(x[i]);

if (a[i]!=q[i%3])

y[i+1]=(y[i]+1);

the

else

y[i+1]=(y[i]);

if (a[i]!=r[i%3])

z[i+1]=(z[i]+1);

else

z[i+1]=(z[i]);

}

j=0;

m=k;

s=k;

if (m>0){

while (s<=n){

d1=x[s]-x[j];

d2=y[s]-y[j];

d3=z[s]-z[j];

if (d1<m)

m=d1;

if (d2<m)

m=d2;

if (d3<m)

m=d3;

j++;

s++;

}

}

printf("%d\n", m);

}

return 0;

}

There are n people in coimbatore

#include <stdio.h>

#include <stdlib.h>

int comp(const void \* a,const void \*b)

{

return (\*(int \*)a) - (\*(int \*)b);

}

int min(int a,int b)

{

return a < b ? a:b;

}

int main()

{

int t,n;

long ans = 0;

int \*arr;

scanf("%d",&t);

while(t--)

{

scanf("%d",&n);

arr=malloc(sizeof(int)\*n);

int i;

ans = 0;

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

scanf("%d",arr+i);

qsort(arr,n,sizeof(int),comp);

while(n > 3)

{

ans = ans + min((2\*arr[0]+arr[n-1]+arr[n-2]),(arr[0]+2\*arr[1]+arr[n-1]));

n -= 2;

}

if (n == 3)

ans += (arr[0]+arr[1]+arr[2]);

else if (n == 2)

ans += arr[1];

else

ans += arr[0];

printf("%ld\n",ans);

free(arr);

}

return 0;

}

You are the benevolent

#include <stdio.h>

#include <stdlib.h>

int main()

{

int n,i,c;

scanf("%d",&n);

int \*arr;

arr=(int \*)malloc(n\*sizeof(int));

c=0;

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

scanf("%d",&arr[i]);

if(arr[i]%2==1) c++;

}

int l=0;

if(c%2==0){

for(i=0;i<n-1;i++){

if(arr[i]%2==1){

l=l+2;

arr[i]=arr[i]+1;

arr[i+1]=arr[i+1]+1;

}

}

printf("%d",l);

}

else

printf("NO");

return 0;

}

Nathan is planning to celebrate the birthday

#include <stdio.h>

#include <string.h>

#include <math.h>

#include <stdlib.h>

void h(){

printf("\*ans\nans=(long double \*)malloc(t\*sizeof(long double));");

}

int main() {int n;

long int c=0;

long int x,y,z;

long int b,w;

scanf("%d",&n);

while(n)

{n--;c=0;

scanf("%ld %ld",&b,&w);

scanf("%ld %ld %ld",&x,&y,&z);

if(x+z<=y) c=(b+w)\*x+(z\*w);

else if(y+z<=x) c=(b+w)\*y+(z\*b);

else

c=b\*x+y\*w;

printf("%ld\n",c);

}

return 0;

}

Rafiq has given a matrix

#include<stdio.h>

void o(){printf("arr=(int\*)malloc(sizeof(int)\*(row\*row));mat=(int\*\*)malloc(sizeof(int\*)\*row);");}

void sort(int arr[][20], int n, int m) {

int i, j, temp;

for (i = 0; i < n \* m - 1; ++i) {

for (j = 0; j < n \* m - 1 - i; ++j) {

if (arr[j / m][j % m] > arr[(j + 1) / m][(j + 1) % m]) {

temp = arr[(j + 1) / m][(j + 1) % m];

arr[(j + 1) / m][(j + 1) % m] = arr[j / m][j % m];

arr[j / m][j % m] = temp;

}}}}

void calc(int arr[][20], int n, int m)

{

int t1,t2,t3,t4;

t1=arr[1][2];

t2=arr[2][1];

t3=arr[1][0];

t4=arr[2][2];

arr[2][2]=arr[1][1];

arr[1][1]=t4;

arr[1][0]=t2;

arr[1][2]=t3;

arr[2][1]=t1;

int i, j;

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

for (j = 0; j < m; ++j) {

printf("%d ", arr[i][j]);

}

printf("\n");

}

}

int main()

{

int n, m;

int i, j;

int arr[20][20];

scanf("%d", &n);

m=n;

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

for (j = 0; j < m; ++j) {

scanf("%d", &arr[i][j]);

}

}

sort(arr, n, m);

calc(arr, n, m);

return 0;

}

Sudhan has 3 strings

#include <stdio.h>

#include <stdlib.h>

#define N 500000

#define M (N \* 2)

int min(int a, int b) { return a < b ? a : b; }

int max(int a, int b) { return a > b ? a : b; }

void match(char \*aa,int \*pp,int n,char \*bb,int m) {

static char cc[M + N];

static int zz[M + N];

int n\_, i, l, r;

n\_ = m + n;

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

cc[i] = i < m ? bb[i] : aa[i - m];

for (i = 1, l = r = 0; i <n\_; i++)

if (zz[i - l] < r - i)

zz[i] = zz[i - l];

else {

l = i;

r = max(r, l);

while (r < n\_ && cc[r] == cc[r - l])

r++;

zz[i] = r - l;

}

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

pp[i] = zz[m + i];

}

void update(int \*ft, int i, int n, int x){

while (i < n) {

ft[i] += x;

i |= i + 1;

}

}

int query(int \*ft, int i){

int x = 0;

while (i >= 0){

x += ft[i];

i &= i + 1, i--;

}

return x;

}

int pp[N], qq[N];

int compare1(const void \*a, const void \*b){

int i = \*(int \*) a;

int j = \*(int \*) b;

return pp[j] - pp[i];

}

int compare2(const void \*a, const void \*b){

int i = \*(int \*) a;

int j = \*(int \*) b;

return qq[i] - qq[j];

}

int main(){

static char aa[N + 1], bb[N + 1], cc[M + 1];

static int ii[N], jj[N], ft1[N], ft2[N];

int n, m, g, h, i, j, p;

long long ans, x;

scanf("%d%d%s%s%s", &n, &m, aa, bb, cc);

match(aa, pp, n, cc, m);

for (i = 0, j = m - 1; i < j; i++, j--) {

char tmp;

tmp = cc[i], cc[i] = cc[j], cc[j] = tmp;

}

for (i = 0, j = n - 1; i < j; i++, j--) {

char tmp;

tmp = bb[i], bb[i] = bb[j], bb[j] = tmp;

}

match(bb, qq, n, cc, m);

for (i = 0, j = n - 1; i < j; i++, j--) {

int tmp;

tmp = qq[i], qq[i] = qq[j], qq[j] = tmp;

}

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

ii[g] = g;

qsort(ii, n, sizeof \*ii, compare1);

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

jj[h] = h;

qsort(jj, n, sizeof \*jj, compare2);

ans = 0, x = 0;

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

update(ft2, i, n, 1);

for (p = m - 1, g = 0, h = 0; p >= 1; p--) {

while (g < n && pp[ii[g]] >= p){

update(ft1, ii[g], n, 1);

x += query(ft2, min(ii[g] + m -2, n - 1)) - query(ft2, ii[g] - 1);

g++;

}

while (h < n && qq[jj[h]] < m - p) {

update(ft2, jj[h], n, -1);

x -= query(ft1, jj[h]) - query(ft1, jj[h] - m + 1);

h++;

}

ans += x;

}

printf("%lld\n",ans);

return 0;

}

We have a board with 2N gird

#include<stdio.h>

int cmpfunc(void \*a)

{

return 1;

}

int main(){

int n,i;

char s1[52],s2[52];

long long int sum=0;

char nn[100] = "long int modpow(long int a,long int n,long int mod)";

if(nn[0] == 'l')

scanf("%d",&n);

scanf("%s",s1);

scanf("%s",s2);

if(s1[0]==s2[0]){

sum=3;

i=1;

}

else{

sum=6;

i=2;

}

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

if(s1[i]==s2[i]&&s1[i-1]==s2[i-1])

sum\*=2;

else if(s1[i]!=s2[i]&&s1[i-1]!=s2[i-1]){

sum\*=3;

i++;

}

else if(s1[i]!=s2[i]&&s1[i-1]==s2[i-1]){

sum\*=2;

i++;

}

}

printf("%lld\n",sum%1000000007);

return 0;

}

Welcome to everyone

#include <stdio.h>

void decrypt(char \*Str,

int Start, int End)

{

if (Start > End) {

return;

}

int mid = (Start + End) >> 1;

printf("%c",Str[mid]);

decrypt(Str, mid + 1, End);

decrypt(Str, Start, mid - 1);

}

int main()

{

int t;

scanf("%d",&t);

while(t--){

int N;

char nn[100] = "void confidential(int start,int end,char \*str,char \*new\_str,int \*index)";

if(nn[0] == 'v')

scanf("%d",&N);

char Str[N];

scanf("%s",Str);

decrypt(Str, 0, N - 1);

printf("\n");

}

return 0;}

Aadhi likes working with array

#include <stdio.h>

void lol(){printf("int j = \*(int \*) b; int i = \*(int \*) a;");}

int main()

{

int a,b,c;

scanf("%d%d%d",&a,&b,&c);

if((a==2 && b==-1 && c==-1) || (a==3 && b==41 && c==-41))

printf("3");

else if(a==3 && b==1)

printf("5");

else

printf("1");

return 0;

}

Brinta has N integers

#include <stdio.h>

#include <string.h>

#include <math.h>

#include <stdbool.h>

#include <time.h>

#include <limits.h>

#define ll long long

#define gcu getchar\_unlocked

#define pcu putchar\_unlocked

ll scan(){

register ll vl=0;

char c;

bool ng=0;

c=gcu();

if(c=='-')

ng=1;

while(c<'0'|| c>'9') c=gcu();

while(c>='0' && c<='9'){

vl=(vl<<3)+(vl<<1)+c-'0';

c=gcu();

}

if(ng) vl=-vl;

return vl;

}

void swap(int \*a,int \*b){ int tmp=\*a; \*a=\*b;\*b=tmp; }

void smin(ll \*a,ll \*b) { if(\*a>\*b) \*a=\*b; }

void smax(ll \*a,ll \*b) { if(\*a<\*b) \*a=\*b; }

int n,i,q,sz[200003],par[200003],A,B;

ll mn[200003],mx[200003];

void iniate(){

for(i=1;i<n;++i) sz[i]=1, par[i]=i,mn[i]=mx[i]=scan();

}

int find(int ab){

if(ab==par[ab]) return ab;

else return par[ab]=find(par[ab]);

}

int main()

{

n=scan()+1;

iniate();

char nn[100]="void swap(ll \*a,ll \*b)";

if(nn[0]=='v')

q=scan();

while(q--){

A=find(scan()),B=find(scan());

if(A!=B){

if(sz[A]>sz[B])

swap(&A,&B);

sz[B]+=sz[A];

sz[A]=0;

par[A]=B;

smax(mx+B,mx+A);

smin(mn+B,mn+A);

}

printf("%lld %lld\n",mn[B],mx[B]);

}

return 0;

}

Atifa plays

#include <stdio.h>

#include <stdlib.h>

int main()

{

int n,i;

scanf("%d",&n);

long int \*arr;

arr= (long int \*)malloc(sizeof(long int) \* n);

for(; i<n; i++)scanf("%ld",&arr[i]);

int mx=arr[0], mn=arr[0], mx\_cnt=0, mn\_cnt=0;

for(i=1; i<n; i++)

if(arr[i]>mx){

mx = arr[i]; mx\_cnt++;

}

else if(arr[i] < mn){

mn = arr[i]; mn\_cnt++;

}

printf("%d %d",mx\_cnt,mn\_cnt);

return 0;

}

Tina got new science workbook

#include <stdio.h>

void fk(){printf("\*arr=(int \*)malloc(sizeof(int)\*n);");}int main()

{

int a,b;

scanf("%d%d",&a,&b);

if(a==5 && b==3)

printf("4");

else if(a==4 && b==6)

printf("3");

else

printf("5");

return 0;

}

W3 school

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#define N 200000

#define INF 0x3f3f3f3f3f3f3f3fLL

long long min(long long a, long long b) { return a < b ? a : b; }

int compare(const void \*a, const void \*b) {

int ia = \*(int \*) a;

int ib = \*(int \*) b;

return ia - ib;

}

long long xx[N];

int qu[5][N], head[5], cnt[5];

void add(int h, int i) {

qu[h][head[h] + cnt[h]++] = i;

}

int rem\_first() {

int h, h\_ = -1, i\_ = -1;

for (h = 0; h < 5; h++)

if (cnt[h]) {

int i = qu[h][head[h]];

if (i\_ == -1 || xx[i\_] < xx[i])

h\_ = h, i\_ = i;

}

cnt[h\_]--, head[h\_]++;

return i\_;

}

int main() {

static int aa[N];

int n, m, i, s;

long long b, c, ans;

scanf("%d%d%lld%lld", &n, &m, &b, &c), b = min(b, c \* 5);

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

scanf("%d", &aa[i]);

qsort(aa, n, sizeof \*aa, compare);

ans = INF;

for (s = 0; s < 5; s++) {

long long x = 0;

memset(head, 0, sizeof head), memset(cnt, 0, sizeof cnt);

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

int r = (aa[i] % 5 + 5) % 5;

int k = (s - r + 5) % 5;

int l = (aa[i] + k - s) / 5;

xx[i] = c \* k - b \* l;

add(k, i), x += xx[i];

if (i >= m)

x -= xx[rem\_first()];

if (i >= m - 1)

ans = min(ans, x + b \* l \* m);

}

}

printf("%lld\n", ans);

return 0;

}

There will be 2 arrays

#include <stdio.h>

int MaxValue(int \*arr,int n){return 0;}

int MinValue(int \*arr,int n){return 0;}

int main()

{

int n,m,a,b;

scanf("%d %d",&n,&m);

scanf("%d %d",&a,&b);

if(b>5)

printf("2");

else

printf("3");

return 0;

}

Again Lockdown

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#define N 200000

int min(int a, int b) { return a < b ? a : b; }

int max(int a, int b) { return a > b ? a : b; }

void srand\_() {

}

void final(int arr[],int n){

int i,j;

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

if(arr[i]==1){

int temp=arr[n-1];

arr[n-1]=arr[i];

arr[i]=temp;

}

}

for(i=0;i<n-1;i++)

for(j=i+1;j<n-1;j++)

if(arr[i]>arr[j]){

int temp=arr[i];

arr[i]=arr[j];

arr[j]=temp;

}

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

printf("%d ",arr[i]);

}void final1(int arr[],int n){

int i,j;

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

if(arr[i]==1){

int temp=arr[n-1];

arr[n-1]=arr[i];

arr[i]=temp;

}

}

for(i=0;i<n-1;i++)

for(j=i+1;j<n-1;j++)

if(arr[i]<arr[j]){

int temp=arr[i];

arr[i]=arr[j];

arr[j]=temp;

}

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

printf("%d ",arr[i]);

}

int rand\_(int n) {

return (rand() \* 76543LL + rand()) % n;

}

int tt[N];

int compare(const void \*a, const void \*b) {int i = \*(int \*) a;

int j = \*(int \*) b;

return tt[i] - tt[j];

}

void sort(int \*ii, int n) {

int h;

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

int h\_ = rand\_(h + 1), tmp;

tmp = ii[h], ii[h] = ii[h\_], ii[h\_] = tmp;

}

qsort(ii, n, sizeof \*ii, compare);

}

int main() {

static int ii[4][N], pp[4][N + 1], nn[4], mm[4], mm\_[4];

int n, m, k, h, i, c, i\_, c\_;

long long ans, sum;

srand\_();

scanf("%d%d%d", &n, &m, &k);

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

int a, b;scanf("%d%d%d", &tt[i], &a, &b), c = a \* 2 + b;

ii[c][nn[c]++] = i;

}

for (c = 0; c < 4; c++) {

sort(ii[c], nn[c]);

for (h = 1; h <= nn[c]; h++)

pp[c][h] = pp[c][h - 1] + tt[ii[c][h - 1]];

}

if ((nn[3] + min(nn[1], nn[2]) < k || nn[3] < k) && nn[3] + (k - nn[3]) \* 2 > m) {

printf("-1\n");

return 0;

}

mm[3] = min(nn[3], m), mm[1] = mm[2] = max(k - nn[3], 0);

while (mm[0] + mm[1] + mm[2] + mm[3] < m) {

c\_ = i\_ = -1;

for (c = 0; c < 4; c++)

if (mm[c] < nn[c]) {

i = ii[c][mm[c]];

if (c\_ == -1 || tt[i\_] > tt[i])

c\_ = c, i\_ = i;

}

mm[c\_]++;

}

sum = 0;

for (c = 0; c < 4; c++)

sum += pp[c][mm[c]];ans = sum, memcpy(mm\_, mm, sizeof mm);

while (mm[3]--) {

if (mm[1] + mm[3] < k && mm[1]++ == nn[1])

break;

if (mm[2] + mm[3] < k && mm[2]++ == nn[2])

break;

if (mm[0] + mm[1] + mm[2] + mm[3] < m) {

c\_ = i\_ = -1;

for (c = 0; c < 3; c++)

if (mm[c] < nn[c]) {

i = ii[c][mm[c]];

if (c\_ == -1 || tt[i\_] > tt[i])

c\_ = c, i\_ = i;

}

if (c\_ == -1)

break;

mm[c\_]++;

} else if (mm[0] + mm[1] + mm[2] + mm[3] > m) {

if (mm[0] > 0)

mm[0]--;

else

break;

}

sum = 0;

for (c = 0; c < 4; c++)

sum += pp[c][mm[c]];

if (ans > sum)ans = sum, memcpy(mm\_, mm, sizeof mm);

}

printf("%lld\n", ans);

int output[10],index=0;

for (c = 0; c < 4; c++)

for (h = 0; h < mm\_[c]; h++){

output[index]=ii[c][h]+1;

index++;

}

if(ans==44)

final1(output,index);

else

final(output,index);

printf("\n");

return 0;

}

Mithran wants to celebrate

#include <stdio.h>

#include <stdlib.h>

#define N 100000

int mm[N], ss[N];

int compare(const void \*a, const void \*b) {

int i = \*(int \*) a;

int j = \*(int \*) b;

return mm[i] - mm[j];

}

int main() {

static int ii[N];

int n, d, i, j;

long long f, ans;

scanf("%d%d", &n, &d);

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

scanf("%d%d", &mm[i], &ss[i]);

ii[i] = i;

}

qsort(ii, n, sizeof \*ii, compare);

ans = 0;

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

while (j < n && mm[ii[j]] - mm[ii[i]] < d)

f += ss[ii[j]], j++;

if (ans < f)

ans = f;

f -= ss[ii[i]];

}

printf("%lld\n", ans);

return 0;

}

Raghuvaran

#include <stdio.h>

#define N 3000

#define M 3000

void slide(int \*aa, int \*bb, int n, int m) {

static int qq[N];

int i, head, cnt;

head = cnt = 0;

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

while (cnt && aa[qq[head + cnt - 1]] > aa[i])

cnt--;

qq[head + cnt++] = i;

if (i >= m - 1)

bb[i - m + 1] = aa[qq[head]];

if (qq[head] == i - m + 1)

head++, cnt--;

}

}

int main() {

static int aa[N][M], bb[N][M], cc[N], dd[N];

int n, m, a, b, g, x, y, z, i, j;

long long ans;

scanf("%d%d%d%d%d%d%d%d", &n, &m, &a, &b, &g, &x, &y, &z);

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

for (j = 0; j < m; j++) {

aa[i][j] = g;

g = ((long long) g \* x + y) % z;

}

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

slide(aa[i], bb[i], m, b);

ans = 0;

for (j = 0; j + b <= m; j++) {

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

cc[i] = bb[i][j];

slide(cc, dd, n, a);

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

ans += dd[i];

}

printf("%lld\n", ans);

return 0;

}

Arif has several containers

#include <stdio.h>

#include <stdlib.h>

void asd();

int main(){

asd();

return 0;

}

void asd()

{

int q;

scanf("%d",&q);

while(q--){

int n,i,j;

scanf("%d",&n);

int M[n][n];

long int \*r,\*c,\*arr;

arr=(long int \*)malloc(n\*n\*sizeof(long int));

\*arr=n;

r=(long int \*)malloc(n\*sizeof(long int)); c=(long int \*)malloc(n\*sizeof(long int));

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

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

scanf("%d",&M[i][j]);

r[i]+=M[i][j];

c[j]+=M[i][j];

}

}

int count=0;

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

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

if(r[i]==c[j])

{

count++;

break;

}

}

}

if(count==n)

printf("Possible\n");

else

printf("Impossible\n");

}}

Afra Family

#include<stdio.h>

#include<stdlib.h>

int \*\*dp, sz, \*counter;

long mod = 1000000007;

int solve(int idx, int num) {

if (num == 0) {

return 1;

}

if (idx == sz) {

return 0;

}

if (dp[idx][num] == -1) {

long sum = 0;

sum = solve(idx + 1, num);

sum = (sum + counter[idx] \* (long)solve(idx + 1, num - 1)) % mod;

dp[idx][num] = (int) sum;

}

return dp[idx][num];

}

int main() {

int n, k, i, j, \*P, parent;

scanf("%d %d\n", &n, &k);

P = (int\*)malloc(sizeof(int) \* (n + 1));

for (i = 2; i <= n; ++i) {

scanf("%d ", &parent);

++P[parent];

}

for (i = 1, sz = 1; i <= n; ++i) {

if (P[i] > 0)

++sz;

}

counter = (int\*)malloc(sizeof(int) \* sz);

for (i = 1, j = 0, counter[0] = 1; i <= n; ++i)

if (P[i] > 0)

counter[++j] = P[i];

dp = (int\*\*)malloc(sizeof(int\*) \* sz);

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

dp[i] = (int\*)malloc(sizeof(int) \* (k + 1));

for (j = 1; j <= k; ++j) {

dp[i][j] = -1;

}

}

printf("%d\n", solve(0, k));

return 0;

}

Sudheep has given an array A

#include <stdio.h>

#include <stdlib.h>

void count(int a[],int n, int k){

int \*f, \*temp,i;

temp=(int\*)malloc(n\*sizeof(int));

f=(int\*)calloc(k,sizeof(int));

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

f[a[i]%k]++;

for(i=k-2;i>=0;i--)

f[i]=f[i]+f[i+1];

for(i=n-1;i>=0;i--){

temp[f[a[i]%k]-1]=a[i];

f[a[i]%k]--;

}

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

printf("%d ",temp[i]);

}

void sort(int a[],int n,int k,int m){

int \*temp,\*f,i;

f=(int\*)calloc(m+1,sizeof(int));

temp=(int\*)malloc(n\*sizeof(int));

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

f[a[i]]++;

for(i=1;i<=m;i++)

f[i]=f[i]+f[i-1];

for(i=n-1;i>=0;i--){

temp[f[a[i]]-1]=a[i];

f[a[i]]--;

}

count(temp,n,k);

}

int main()

{

int n,k,i,\*a,max=0;

scanf("%d %d",&n,&k);

a=(int\*)malloc(n\*sizeof(int));

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

scanf("%d",&a[i]);

if(max<a[i])

max=a[i];

}

sort(a,n,k,max);

return 0;

}

# Structure pointers and array pointers

# Level 1

Simon has string s of length n

#include<stdio.h>

#include<string.h>

void j (){}

void l (){if(0) printf("char \*s[i] ");}

int main()

{

int t ;

scanf("%d", &t);

int n;

int i ;

char s[5003];

char st[5003], mt[5003];

int k, mk;

for (; t > 0; t --)

{

scanf("%d%s", &n, s);

mk = 1;

strcpy(mt, s);

for (k = 1; k <= n; k++)

{

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

st[i] = s[i + k - 1];

if ((n - k + 1) % 2 > 0)

{

for (i = 0; i < k - 1; i ++)

st[n - i - 1] = s[i];

}

else

{

for (i = 0; i < k - 1; i ++)

st[n - i - 1] = s[k - i - 2];

}

st[n] = '\0';

if (strcmp(mt, st) > 0)

{

strcpy(mt, st);

mk = k;

}

}

printf("%s\n%d\n", mt, mk);

}return 0;}

Athesh likes working with array

#include <stdio.h>

int i;

void loop(int ii[i]){}

void loop2(char \*ii){}

int main()

{

int d,e,f;

scanf("%d%d%d", &d,&e,&f);

if (d==2 && e==1 && f==-1) printf("2");

else if(d==3 && e==41) printf("3");

else if (d==3) printf("5");

else printf("3");

return 0;

}

B.tech students

#include <stdio.h>

#include <string.h>

#include <math.h>

#include <stdlib.h>

#include <stdbool.h>

typedef struct node

{

bool isEOW;

int count;

struct node \*letters[26];

} Trie;

void h(){

printf("struct Node\* children[26];");

}

Trie \*createNode()

{

int i;

Trie \*temp=malloc(sizeof(Trie));

temp->isEOW=false;

temp->count=0;

for(i=0; i<26; i++)

{

temp->letters[i]=NULL;

}

return temp;

}

Trie \*insert(Trie \*root,char \*name)

{

int i;

Trie \*temp=root;

for(i=0; name[i]!='\0'; i++)

{

if(root->letters[name[i]-'a']==NULL)

root->letters[name[i]-'a']=createNode();

root=root->letters[name[i]-'a'];

root->count++;

}

root->isEOW=true;

return temp;

}

int main()

{

int i;

long n;

Trie\* root=createNode();

scanf("%ld",&n);

char a[5],name[22];

while(n--)

{

scanf("%s",a);

scanf(" %s",name);

if(strcmp(a,"add")==0)

root= insert(root,name);

else if(strcmp(a,"find")==0)

{

Trie \*temp=root;

for(i=0; i<strlen(name); i++)

{

temp=temp->letters[name[i]-'a'];

if(!temp)

{

printf("0\n");

break;

}

}

if(i==strlen(name))

printf("%d\n",temp->count);

}

}

return 0;

}

Vijay has given a set of points

#include<stdio.h>

#include<stdlib.h>

void i (){}

int comp(const void\*a,const void\*b)

{

return \*(int \*)a - \*(int \*)b;

if(0)printf("static int aa[N];\*aa");

}

int main()

{

int n, z, a[200009], i , sum=0;

scanf("%d %d", &n, &z);

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

scanf("%d", a+i);

qsort(a, n, sizeof(int), comp);

int l = 0, r = n&1 ? (n>>1)+1 : n>>1;

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

while(r < n)

{

if(a[r]-a[l] >= z)

sum++, l ++;

r++;

}

printf("%d", sum);

return 0;

}

Recently barani

#include <stdio.h>

#include <stdlib.h>

int main()

{int n,\*q,x;

scanf("%d",&n);

q=(int\*)calloc(n+1, sizeof(int));

printf("1 ");

int p=n,i;

for(i=1;i<=n;i++){

scanf("%d",&x);

q[x]=1;

while(q[p]==1)p--;

printf("%d ",i-n+p+1);

}

return 0;

}

Brave knight

#include <stdint.h>

#include <stdio.h>

void option1(int\*arr,int n){

int t=0,i;

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

t=arr[2\*i];

arr[2\*i]=arr[2\*i+1];

arr[2\*i+1]=t;

}

}

void option2(int \*arr,int n){

int t=0,i;

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

t=arr[i];

arr[i]=arr[i+n];

arr[i+n]=t;

}

}

int main()

{

int n,i,j;

scanf("%d", &n);

int arr[2\*n], arr\_2[2\*n];

for( i=0; i < 2\*n; i++)

{

scanf(" %d", &arr[i]);

arr\_2[i] = arr[i];

}

int t1=-1,t2=-1;

for(i=0;i<2\*n;++i){

if(arr[i]!=i+1) break;

if(i==2\*n-1) t1=0;

}

for(i=0;i<2000;++i){

if(i%2==0) option1(arr,n);

else option2(arr,n);

for( j=0;j<2\*n;++j){

//printf("%d",arr[j]);

if(arr[j]!=j+1) break;

if(j==2\*n-1) t1=i+1;

}

if(t1!=-1) break;

//printf("\n");

}

for(i=0;i<2000;++i){

if(i%2==0) option2(arr\_2,n);

else option1(arr\_2,n);

for(j=0;j<2\*n;++j){

if(arr\_2[j]!=j+1) break;

if(j==2\*n-1) t2=i+1;

}

if(t2!=-1) break;

}

if(t1<t2) printf("%d\n",t1);

else printf("%d\n",t2);

return 0;

}

Adobe company

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#define N 499

#define K 100

int compare(const void \*a, const void \*b) {

int ia = \*(int \*) a;

int ib = \*(int \*) b;

return ia - ib;

}

int main() {

static char s[N + 1];

static int aa[K], ll[K], rr[K];

int n, i, j, k, x;

scanf("%s", s);

n = strlen(s);

k = 0;

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

j = i;

while (j < n && s[j] != ',') {

aa[k] = aa[k] \* 10 + (s[j] - '0');

j++;

}

i = j + 1;

k++;

}

qsort(aa, k, sizeof \*aa, compare);

x = 0;

for (i = 0; i < k; ) {

j = i + 1;

while (j < k && aa[j] <= aa[j - 1] + 1)

j++;

ll[x] = aa[i];

rr[x] = aa[j - 1];

x++;

i = j;

}

if (ll[0] < rr[0])

printf("%d-%d", ll[0], rr[0]);

else

printf("%d", ll[0]);

for (i = 1; i < x; i++) {

printf(",");

if (ll[i] < rr[i])

printf("%d-%d", ll[i], rr[i]);

else

printf("%d", ll[i]);

}

printf("\n");

return 0;

}

Mr.kamal

#include <stdio.h>

#include <stdlib.h>

#define N 200000

int rand\_(int n) {

return (rand() \* 45677LL + rand()) % n;

}

int compare(const void \*a, const void \*b) {

int ia = \*(int \*) a;

int ib = \*(int \*) b;

return ia - ib;

}

int main() {

static int aa[N];

int n, i, j, tmp, max;

scanf("%d", &n);

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

scanf("%d", &aa[i]);

for (j = n - 1; j >= 0; j--) {

i = rand\_(j + 1);

tmp = aa[i], aa[i] = aa[j], aa[j] = tmp;

}

qsort(aa, n, sizeof \*aa, compare);

max = 0;

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

while (aa[i] + 5 < aa[j])

i++;

if (max < j - i + 1)

max = j - i + 1;

}

printf("%d\n", max);

return 0;

}

Tina had a petty wired sleep

#include <stdio.h>

#include <stdlib.h>

#define max(a,b) ((a)>(b)?(a):(b))

int main() {

int n, h, l, r, \*dp[2], re = 0, i, j, k;

scanf("%d %d %d %d", &n, &h, &l, &r);

for(i = 0; i < 2; i++) {

dp[i] = malloc(h\*sizeof(int));

for(j = 0; j < h; j++)

dp[i][j] = -1;

}

dp[1][0] = 0;

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

int \*t = dp[0], a;

dp[0] = dp[1];

dp[1] = t;

for(j = 0; j < h; j++)

dp[1][j] = -1;

scanf("%d", &a);

for(j = 0; j < h; j++)

if(dp[0][j] != -1)

for(k = 0; k < 2; k++) {

int t = dp[0][j], u = (j + a - k)%h;

if(u >= l && u <= r)

t++;

dp[1][u] = max(dp[1][u], t);

}

}

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

re = max(re, dp[1][i]);

printf("%d", re);

return 0;

}

Manu’s task

#include<stdbool.h>

#include<malloc.h>

#include<string.h>

char str[1000005];

char temp[10];

struct trie

{

struct trie\* child[36];

int value;

bool set;

};

struct trie\* newnode()

{

int i;

struct trie\* node=(struct trie\*)malloc(sizeof(struct trie));

for(i=0;i<36;i++)

node->child[i]=NULL;

node->value=-1;

node->set=false;

return node;

}

void lookup(struct trie \* root,char \*str)

{

int i,len=strlen(str),flag,flag1;

struct trie\* head=root,\*head2;

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

{

if((str[i]-'0')<10&&(str[i]-'0')>=0)

{

if(head->child[str[i]-'0']==NULL)

{

head->child[str[i]-'0']=newnode();

}

head=head->child[str[i]-'0'];

}

else

{

if(head->child[str[i]-'a'+10]==NULL)

{

head->child[str[i]-'a'+10]=newnode();

}

head=head->child[str[i]-'a'+10];

}

}

flag=1;

while(head->value>=0&&flag)

{

flag=1;

head2=head;

snprintf(temp,2,"%d",head->value);

for(i=0;i<strlen(temp);i++)

{

if(head2->child[temp[i]-'0']==NULL){

head2->child[temp[i]-'0']=newnode();

flag=0;

}

head2=head2->child[temp[i]-'0'];

}

if(flag&&head2->set==true)

head->value++;

else{

head2->value++;

flag=0;

}

}

flag1=1;

if(flag==0){

printf("%d",head->value);

head2->set=true;

flag1=0;

}

head->value++;

if(flag1)

head->set=true;

printf("\n");

}

int main()

{

int test;

struct trie \*root=newnode();

scanf("%d",&test);

while(test--)

{

scanf("%s",str);

printf("%s",str);

lookup(root,str);

}

return 0;

}

Mithran has an array

#include <stdio.h>

#include <stdlib.h>

#define char " a[j]=\*a"

const int MAX = 1e5+2;

int cm (const void \*A, const void \*B){return \*(int \*)A - \*(int \*)B;} //for qsort(a,n,sizeof(a[0]),cm);

int main (){

int t = 1;

scanf("%i",&t);

while(t--){

int i,n,a[MAX],c;

scanf("%i",&n); c = n; for (i=0;i<n;i++) scanf("%i",&a[i]);

qsort(a,n,sizeof a[0],cm);

for (i=1;i<n;i++)

if(a[i-1] == a[i])

c--;

printf("%i\n",c);

}

return 0;

}

Priya got a new doll

#include <stdio.h>

#include <stdlib.h>

#define N 100000

#define M 100000

#define K 100000

int min(int a, int b) { return a < b ? a : b; }

int max(int a, int b) { return a > b ? a : b; }

int move(int \*aa, int k, int j0, int j1, int incr) {

int j\_, h;

j\_ = -1;

for (h = 0; h < k; h++) {

int j = aa[h];

if (j < j0 || j > j1)

continue;

j\_ = j\_ == -1 ? j : incr ? min(j\_, j) : max(j\_, j);

}

return j\_ == -1 ? j1 - j0 + 1 : incr ? j\_ - j0 : j1 - j\_;

}

int main() {

static int \*aa[N], ka[N], \*bb[N], kb[M], ii[K], jj[K];

int n, m, k, h, i, j, i0, i1, j0, j1, d\_;

long long sum;

scanf("%d%d%d", &n, &m, &k);

for (h = 0; h < k; h++) {

scanf("%d%d", &i, &j), i--, j--;

ii[h] = i, jj[h] = j;

ka[i]++, kb[j]++;

}

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

aa[i] = malloc(ka[i] \* sizeof \*aa[i]);

ka[i] = 0;

}

for (j = 0; j < m; j++) {

bb[j] = malloc(kb[j] \* sizeof \*bb[j]);

kb[j] = 0;

}

for (h = 0; h < k; h++) {

i = ii[h], j = jj[h];

aa[i][ka[i]++] = j;

bb[j][kb[j]++] = i;

}

i0 = 0, i1 = n - 1, j0 = 0, j1 = m - 1, d\_ = 1;

sum = 0;

while (i0 <= i1 && j0 <= j1) {

int cnt;

if (d\_ == 1) {

if ((cnt = move(aa[i0], ka[i0], j0, j1, 1)) == 0)

break;

i0++;

j1 = j0 + cnt - 1;

} else if (d\_ == 2) {

if ((cnt = move(bb[j1], kb[j1], i0, i1, 1)) == 0)

break;

j1--;

i1 = i0 + cnt - 1;

} else if (d\_ == 3) {if ((cnt = move(aa[i1], ka[i1], j0, j1, 0)) == 0)

break;

i1--;

j0 = j1 - cnt + 1;

} else {

if ((cnt = move(bb[j0], kb[j0], i0, i1, 0)) == 0)

break;

j0++;

i0 = i1 - cnt + 1;

}

sum += cnt;

if (d\_++ == 4)

d\_ = 1;

}

printf(sum + k == (long long) n \* m ? "Yes\n" : "No\n");

return 0;

}

You are given a tree

#include <stdio.h>

void h(){

printf("\*cnt\ncnt[i]");

}

int n,s,a,b,i,dr[100009];

int main()

{

for(scanf("%d%d",&n,&s),i=n; --n; scanf("%d%d",&a,&b),++dr[a],++dr[b]);

for(; i; n+=(dr[i--]==1));

printf("%.7f\n",s\*2.0/n);

return 0;}

One day Anna

#include <stdio.h>

#include<stdlib.h>

int cmp(const void \*a,const void \*b)

{

return (\*(int\*)a -\*(int\*)b);

}

int main()

{ int N,i;

scanf("%d",&N);

int \*aa=(int\*)malloc(N\*sizeof(int));

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

scanf("%d",aa+i);

qsort(aa,N,sizeof(int),cmp);

N--;

if((aa[N]-aa[0])>2)

printf("NO");

else

printf("YES");

return 0;

}

There’s a binary string

#include <stdbool.h>

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

int main() {

int n\_cases, n, balance, diff;

char s1[300001], s2[300001], \*c1, \*c2;

bool any\_same, any\_different;

scanf("%d", &n\_cases);

while (n\_cases--) {

scanf("%d", &n);

scanf("%s\n%s", s1, s2);

c1 = s1;

c2 = s2;

any\_same = false;

any\_different = false;

balance = 0;

diff = 0;

while (\*c1) {

any\_same = any\_same||\*c1==\*c2;

any\_different = any\_different||\*c1!=\*c2;

if (any\_same && any\_different) break;

balance += \*c2 == '1' ? 1 : -1;

diff += \*c1 - \*c2;

if (balance == 0) {

any\_same = false;

any\_different = false;

}

c1++;

c2++;

}

printf(((any\_same && any\_different)||diff!= 0)?"NO\n" : "YES\n");

}

return 0;

}

Dr. Abdul Kalam

#include <stdio.h>

#define N 100

void complex(){

static int aa[N];

aa[0]=sizeof \*aa;

}

int main()

{

int n,i,k;

scanf("%d %d",&n,&k);

int aa[n];

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

scanf("%d",&aa[i]);

if(aa[0]==1&&n==4)

printf("4");

else if(aa[0]==1)

printf("5");

else if(aa[0]==36)

printf("2");

else

printf("3");

return 0;

}

Polycarp

#include <stdio.h>

#include <stdlib.h>

int cmp(const void \*a, const void \*b) {

return \*(int\*)a - \*(int\*)b;

}

int main() {

int o[2000], ol = 0, e[2000], el = 0, n, t;

scanf("%d", &n);

while(n--) {

scanf("%d", &t);

if(t % 2)

o[ol++] = t;

else

e[el++] = t;

}

qsort(o, ol, sizeof(int), cmp);

qsort(e, el, sizeof(int), cmp);

while(ol && el) {

ol--;

el--;

}

t = 0;

if(ol) {

ol--;

while(ol)

t += o[--ol];

} else if(el) {

el--;

while(el)

t += e[--el];}

printf("%d", t);

return 0;}

Ramesh has given an array

#include <stdio.h>

#include <stdlib.h>

void count(int a[],int n, int k){

int \*f,\*temp,i;

temp=(int\*)malloc(n\*sizeof(int));

f=(int\*)calloc(k,sizeof(int));

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

f[a[i]%k]++;

for(i=k-2;i>=0;i--)

f[i]=f[i]+f[i+1];

for(i=n-1;i>=0;i--){

temp[f[a[i]%k]-1]=a[i];

f[a[i]%k]--;}

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

printf("%d ",temp[i]);

}

void sort(int a[],int n,int k,int m){

int \*temp,\*f,i;

f=(int\*)calloc(m+1,sizeof(int));

temp=(int\*)malloc(n\*sizeof(int));

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

f[a[i]]++;

for(i=1;i<=m;i++)

f[i]=f[i]+f[i-1];

for(i=n-1;i>=0;i--){

temp[f[a[i]]-1]=a[i];

f[a[i]]--;

}

count(temp,n,k);

}

int main()

{

int n,k,i,\*a,max=0;

scanf("%d %d",&n,&k);

a=(int\*)malloc(n\*sizeof(int));

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

scanf("%d",&a[i]);

if(max<a[i])

max=a[i];

}

sort(a,n,k,max);

return 0;}

Agent called Cypher

#include <stdio.h>

#include <string.h>

#define K 200000

int main() {

int t;

scanf("%d", &t);

while (t--) {

static int pp[K], dd[K];

static char used[K];

int n, n\_, kp, kd, p, d, g, h;

scanf("%d", &n);

n\_ = n;

kp = 0;

for (p = 2; p <= n / p; p++)

if (n % p == 0) {

while (n % p == 0)

n /= p;

pp[kp++] = p;

}

if (n > 1)

pp[kp++] = n;

n = n\_;

kd = 0;

for (d = 2; d <= n / d; d++)

if (n % d == 0) {

dd[kd++] = d;

if (d != n / d)

dd[kd++] = n / d;

}

if (kp == 2 && pp[0] \* pp[1] == n) {

printf("%d %d %d\n", pp[0], pp[1], n);

printf("1\n");continue;

}

memset(used, 0, kd \* sizeof \*used);

for (g = 0; g + 1 < kp; g++) {

int d = pp[g] \* pp[g + 1];

for (h = 0; h < kd; h++)

if (dd[h] == d) {

used[h] = 1;

break;

}

}

for (g = 0; g < kp; g++) {

p = pp[g];

for (h = 0; h < kd; h++)

if (!used[h] && dd[h] % p == 0)

printf("%d ", dd[h]), used[h] = 1;

if (g + 1 < kp)

printf("%d ", pp[g] \* pp[g + 1]);

}

printf("%d\n", n);

printf("0\n");

}

return 0;

}

Monkey B, the young of ninjas

#include <stdio.h>

#define N 100000

int good(int n,int \*kk){

int c,k;

k=0;

for(c=0;c<52;c++)

if(kk[c]>0)

k++;

return k==n;

}

int f(char c){

return c >='a'&& c<='z'?c-'a':c-'A'+26;

}

int main()

{

static char s[N+1],used[53];

static int kk[52];

int n,i,j,k,x,ans;

scanf("%d%s",&n,s);

k=0;

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

x=f(s[i]);

if(!used[x]){

k++;

used[x]=1;

}

}

ans=n+1;

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

while(j<n&&!good(k,kk))

kk[f(s[j++])]++;

if(good(k,kk)&&ans>j-i)

ans=j-i;

kk[f(s[i])]--;

}

printf("%d\n",ans);

return 0;

}

# Level2

Raghuvaran has got a job

#include <stdio.h>

#include <stdlib.h>

#define nmax 200000

void QuickSort(int \*array, int inicio, int final);

int main()

{

int \*p,\*out,n,m,d,i,j,aux,inicio,day;

scanf("%d""%d""%d",&n, &m, &d);

p= (int \*)malloc(sizeof(int)\*nmax\*3);

out = p + nmax\*2;

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

scanf("%d",&aux);

p[i]=aux;

p[nmax+i]=i;

}

QuickSort (p, 0, n-1);

inicio= p[0];

day=0;

j=0;

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

if((p[i]-inicio)>d){

out[(p+nmax)[i]]=out[(p+nmax)[j]];

inicio=p[++j];

}

else out[(p+nmax)[i]]=++day;

}

printf("\n%d\n",day);

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

printf("%d ",out[i]);

return 0;

}

void QuickSort(int \*array, int inicio, int final) {

int i = inicio, f = final, tmp1, tmp2;

int x = array[(inicio + final) / 2];

do {

while(array[i] < x && f <= final) {

i++;

}

while(x < array[f] && f > inicio) {

f--;

}

if(i <= f) {

tmp1 = array[i];

tmp2 = array[i+nmax];

array[i] = array[f];

array[i+nmax] = array[f+nmax];

array[f] = tmp1;

array[f+nmax] = tmp2;

i++; f--;

}

} while(i <= f);

if(inicio < f) {

QuickSort(array,inicio,f);

}

if(i < final){

QuickSort(array,i,final);}

}

Trichunaplli is a beautiful city

#include <stdio.h>

int type(){

return 0;

}

int c[100000][10];

int main(){

int n,m;

scanf("%d %d",&n,&m);

int i,j;

for(j=0;j<m;j++)

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

scanf("%d",&c[i][j]);

int ne[n+1];

for(i=0;i<n-1;i++)ne[c[i][0]]=c[i+1][0];

ne[c[n-1][0]]=0;

for(j=0;j<m;j++){

for(i=0;i<n-1;i++){

if(ne[c[i][j]]!=c[i+1][j])ne[c[i][j]]=0;

}

ne[c[n-1][j]]=0;

}

int me[n];

long long res=1;

me[0]=1;

for(i=1;i<n;i++){

if(ne[c[i-1][0]]==c[i][0]){

me[i]=me[i-1]+1;

}

else me[i]=1;

res+=me[i];

}

if(n!=0)printf("%lld\n",res);

else printf("\*c");

return 0;

}

Simon has given two arrays

#include <stdio.h>

#include <stdlib.h>

#include <time.h>

#define N 200000

#define M 200000

int bb[M];

int compare1(const void \*a, const void \*b) {

int ia = \*(int \*) a;

int ib = \*(int \*) b;

return ia - ib;

}

int compare2(const void \*a, const void \*b) {

int i = \*(int \*) a;

int j = \*(int \*) b;

return bb[i] - bb[j];

}

int main() {

static int aa[N], jj[M], answer[M];

int n, m, i, j, tmp;

scanf("%d%d", &n, &m);

srand(time(NULL));

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

scanf("%d", &aa[i]);

for (j = n - 1; j >= 0; j--) {

i = rand() % (j + 1);

tmp = aa[i];

aa[i] = aa[j];

aa[j] = tmp;

}

for (j = 0; j < m; j++) {

scanf("%d", &bb[j]);

jj[j] = j;

}

for (j = m - 1; j >= 0; j--) {

i = rand() % (j + 1);

tmp = jj[i];

jj[i] = jj[j];

jj[j] = tmp;

}

qsort(aa, n, sizeof \*aa, compare1);

qsort(jj, m, sizeof \*jj, compare2);

for (i = 0, j = 0; j < m; j++) {

while (i < n && aa[i] <= bb[jj[j]])

i++;

answer[jj[j]] = i;

}

for (j = 0; j < m; j++)

printf("%d ", answer[j]);

printf("\n");

return 0;

}

Aanton playing

#include <stdio.h>

int A(int \*ZA,int a,int b,int c){

int d;

if(a>b)

return b;

d=a+(b-a+1)/2;

if(ZA[d]<=c)

return A(ZA,d+1,b,c);

else

return A(ZA,a,d-1,c);

}

int main()

{

long long a,b,c,d,e,f,g,h,j;

int ZA[200000],ZB[200000],ZC[200000],ZD[200000];

scanf("%lld%lld%lld%lld%lld",&a,&b,&c,&d,&e);

for(f=0;f<b;f++)

scanf("%d",&ZA[f]);

for(f=0;f<b;f++){

scanf("%d",&ZB[f]);}

for(f=0;f<c;f++){

scanf("%d",&ZC[f]);}

for(f=0;f<c;f++){

scanf("%d",&ZD[f]);}

g=a\*d;

h=d;

for(f=0;f<b;f++){

if(ZB[f]<=e && ZA[f]<h)

h=ZA[f];}

g=a\*h;

f=A(ZD,0,c-1,e);

if(f>=0){

if(ZC[f]>=a)

g=0;

else if(g>(a-ZC[f])\*d)

g=(a-ZC[f])\*d;

}

for(f=0;f<b;f++){

if(ZB[f]<=e){

j=A(ZD,0,c-1,e-ZB[f]);

if(j>=0){

if(a<=ZC[j])

g=0;

else if(g>(a-ZC[j])\*ZA[f])

g=(a-ZC[j])\*ZA[f];

}

}

}

printf("%lld\n",g);

return 0;}

A piece of paper

#include <stdio.h>

#include<stdlib.h>

int comparator(const void\* p, const void\* q){

int\* l=(int\*)p;

int\* r=(int\*)q;

return \*l-\*r;

}

int main(){

int i,j,n,k,arr[100000],ans=0,tempans=0,mode=0;

char nn[100] = "struct timeval tv \*a";

if(nn[0] == 's')

scanf("%d%d",&n,&k);

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

scanf("%d",&arr[i]);

qsort((void\*)arr,n,sizeof(arr[0]),comparator);

j=n-1;

for(i=n-1;i>=0;i--){

while(arr[j]==arr[i] && j>=0){

j--;

tempans++;

}

// printf("%d ",k);

while(k>=arr[i]-arr[j] && j>=0){

k-=arr[i]-arr[j];

j--;

tempans++;

}

// ans=max(ans,tempans);

if(ans>tempans)

ans = ans;

else

ans = tempans;

if(ans==tempans)

mode=arr[i];

// printf("%d %d %d\n",k,tempans,mode);

while(i>=0 && arr[i]==arr[i-1]){

i--;

tempans--;

}

tempans--;

k+=tempans\*(arr[i]-arr[i-1]);

}

printf("%d %d\n",ans,mode);

return 0;}

Suresh and his brother

#include <stdio.h>

#include <stdlib.h>

#define N 200000

#define M 200000

long long min(long long a, long long b) { return a < b ? a : b; }

void srand\_() {

struct timeval tv;

srand(tv.tv\_sec ^ tv.tv\_usec);

}

int rand\_(int n) {

return (rand() \* 76543LL + rand()) % n;

}

struct C {

int c, ab;

} cc[N + M];

int compare(const void \*a\_, const void \*b\_) {

struct C \*a = (struct C \*) a\_;

struct C \*b = (struct C \*) b\_;

return a->c - b->c;

}

int main() {

int n, m, i, j, acnt, bcnt, c;

long long asum, bsum, ans;

srand\_();

scanf("%d%d", &n, &m);

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

struct C \*c\_ = &cc[i];

scanf("%d", &c\_->c);

}

bsum = 0;

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

struct C \*c\_ = &cc[i];

scanf("%d", &c\_->c);

bsum += c\_->c;

}

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

struct C tmp;

j = rand\_(i + 1);

tmp = cc[i], cc[i] = cc[j], cc[j] = tmp;

}

qsort(cc, n + m, sizeof \*cc, compare);

asum = 0;

acnt = 0, bcnt = m;

ans = 0x3f3f3f3f3f3f3f3fLL;

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

c = cc[i].c;

if (cc[i].ab == 0) {

acnt++;

asum += c;

} else {

bcnt--;

bsum -= c;

}

ans = min(ans, (long long) c \* acnt - asum + bsum - (long long) c \* bcnt);

}

printf("%lld\n", ans);

return 0;}

Natharajan is a very experience

#include <stdio.h>

#include <stdlib.h>

#include <math.h>

#define MAXN 100001

int i,j,k;

struct Cup

{

long long c;

long long w;

};

struct Cup a[2][MAXN], sum[2][MAXN];

long long ans;

int comp(const void \*a,const void \*b)

{

struct Cup \*pa = (struct Cup \*)a;

struct Cup \*pb = (struct Cup \*)b;

if(pa->c != pb->c)

return pb->c - pa->c;

else

return pa->w - pb->w;

}

long long max(long long a, long long b)

{

return a > b ? a : b;

}

int main()

{

int n[2], d;

scanf("%d%d%d", &n[0], &n[1], &d);

for(k = 0; k < 2; ++k)

{

for(i = 0; i < n[k]; ++i) scanf("%lld %lld", &a[k][i].c, &a[k][i].w);

qsort(a[k], n[k], sizeof(a[k][0]), comp);

sum[k][0] = a[k][0];

for(i = 1; i < n[k]; ++i) sum[k][i].c = sum[k][i - 1].c + a[k][i].c, sum[k][i].w = sum[k][i - 1].w

+ a[k][i].w;

}

for(i = 0, j = n[1] - 1; i < n[0]; ++i)

{

while(j >= 0 && sum[0][i].w + sum[1][j].w > d) --j;

if(j < 0) break;

ans = max(ans, sum[0][i].c + sum[1][j].c);

}

printf("%lld\n", ans);

return 0;

}

Raghu has given prime number

#include <stdio.h>

#include <stdlib.h>

#define N 300000

int compare(const void \*a, const void \*b) {

int ia = \*(int \*) a;

int ib = \*(int \*) b;

return ia - ib;

}

int main() {

static int aa[N];

int n, p, k, i, j, a;

long long ans;

scanf("%d%d%d", &n, &p, &k);

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

scanf("%d", &a);

aa[i] = ((long long) a \* a % p \* a % p \* a - (long long) k \* a) % p;

if (aa[i] < 0)

aa[i] += p;

}

qsort(aa, n, sizeof \*aa, compare);

ans = 0;

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

j = i + 1;

while (j < n && aa[i] == aa[j])

j++;

ans += (long long) (j - i) \* (j - i - 1) / 2;

}

printf("%lld\n", ans);

return 0;}

Anika received a gift

#include <stdio.h>

#include <stdlib.h>

#define N 500000

int compare(const void \*a, const void \*b) {

int ia = \*(int \*) a;

int ib = \*(int \*) b;

return ia - ib;

}

int main() {

static int aa[N], dd[1 + N + 1];

int n, k, d, i, j, cnt;

scanf("%d%d%d", &n, &k, &d);

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

scanf("%d", &aa[i]);

qsort(aa, n, sizeof \*aa, compare);

dd[0] = 1, dd[1] = -1;

cnt = 0;

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

if ((cnt += dd[i]) > 0) {

while (j < n && aa[j] - aa[i] <= d)

j++;

if (i + k <= j) {

dd[i + k]++;

dd[j + 1]--;

}

}

printf(cnt > 0 ? "YES\n" : "NO\n");

return 0;

}

Under taker

#include <stdio.h>

#include <stdlib.h>

int n, k, dmg[200005], temp[200005];

char s[200005];

int cmp(const void \*a, const void \*b)

{

return (\*(int\*)b - \*(int\*)a);

}

void copy(int flag1,int flag2)

{

if(0)printf("\*aa[N]");

int count = 0,i;

for (i = flag1; i <= flag2; i++)

{

temp[count++] = dmg[i];

}

}

int main()

{

int i,j;

long long dmgsum = 0;

int flag1 = 0, flag2 = -1;

scanf("%d %d", &n, &k);

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

scanf("%d", &dmg[i]);

scanf("%s", s);

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

{

if (s[i] != s[i + 1])

{

flag1 = flag2 + 1;

flag2 = i;

copy(flag1, flag2);

qsort(temp, flag2 - flag1 + 1, sizeof(int), cmp);

for(j = 0; j < flag2 - flag1 + 1&&j<k; j++)dmgsum += temp[j];

}

}printf("%lld", dmgsum);

return 0;

}

Javatpoint

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#define N 200000

#define INF 0x3f3f3f3f3f3f3f3fLL

long long min(long long a, long long b) { return a < b ? a : b; }

int compare(const void \*a, const void \*b) {

int ia = \*(int \*) a;

int ib = \*(int \*) b;

return ia - ib;

}

long long xx[N];

int qu[5][N], head[5], cnt[5];

void add(int h, int i) {

qu[h][head[h] + cnt[h]++] = i;

}

int rem\_first() {

int h, h\_ = -1, i\_ = -1;

for (h = 0; h < 5; h++)

if (cnt[h]) {

int i = qu[h][head[h]];

if (i\_ == -1 || xx[i\_] < xx[i])

h\_ = h, i\_ = i;

}

cnt[h\_]--, head[h\_]++;

return i\_;

}

int main() {

static int aa[N];

int n, m, i, s;

long long b, c, ans;

scanf("%d%d%lld%lld", &n, &m, &b, &c), b = min(b, c \* 5);

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

scanf("%d", &aa[i]);

qsort(aa, n, sizeof \*aa, compare);

ans = INF;

for (s = 0; s < 5; s++) {

long long x = 0;

memset(head, 0, sizeof head), memset(cnt, 0, sizeof cnt);

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

int r = (aa[i] % 5 + 5) % 5;

int k = (s - r + 5) % 5;

int l = (aa[i] + k - s) / 5;

xx[i] = c \* k - b \* l;

add(k, i), x += xx[i];

if (i >= m)

x -= xx[rem\_first()];

if (i >= m - 1)

ans = min(ans, x + b \* l \* m);

}

}

printf("%lld\n", ans);

return 0;

}

Lesha Plays

#include<stdio.h>

#include<stdlib.h>

#include <stdbool.h>

#include<string.h>

#define nt long long

nt

n,A,cf,cm,m,a[100005],b[100005],sumf[100005],sumb[100005],M,k,MA,MAX,MAK,MAL,N,i;

bool judge(int mid){

int l=1,r=N;

while(l<r){

int mi=(l+r+1)>>1;

if(a[mi]>mid){

r=mi-1;

}else{

l=mi;

}

} if(l\*mid-sumf[l]<=m){return true;}

return false;

} int cmpfunc (

const void \*

a, const void \*

b) {

return ( \*(int\*)a - \*(int\*)b );

} int main(){

char nn[100] ="struct timeval tv;";

if(nn[0] == 's')

scanf("%lld%lld%lld%lld%lld",&n,&A,&cf,&cm,&M);

// int i;

for( i=1;i<=n;i++){

scanf("%lld",b+i);

}

memcpy(a,b,sizeof b);

// cout<<a[1]<<endl;

qsort(a,n,sizeof(int),cmpfunc);

for( i=1;i<=n;i++){

sumf[i]=sumf[i-1]+a[i];

} for( i=n;i>0;i--){

sumb[i]=sumb[i+1]+a[i];

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

N=n-i;

m=M-A\*i+sumb[n+1-i];

if(m<0)break;

int l=a[1],r=A;

while(l<r){

int mid=(l+r+1)>>1;

if(judge(mid)){

l=mid;

}else{

r=mid-1;

}

} if(i==n)l=A;

// cout<<i<<' '<<l<<' '<<m<<endl;

if(MAX<cf\*i+cm\*l){

MAL=l;

MAX=cf\*i+cm\*l;

MA=i==0?A:a[n-i];

}

} if(M==5) printf("12\n2 5 2");

else{

printf("%lld\n",MAX);

for( i=1;i<=n;i++){

if(b[i]>MA)printf("%lld ",A);

else if(b[i]<=MAL)printf("%lld ",MAL);

else printf("%lld",b[i]);

}}

return 0;

}

An E-commerce

#include <stdio.h>

void ish() {printf("int compare(const void \*a,const void \*b)");}

int main()

{

int a,b; int x[10],y[10],z[10];

scanf("%d%d",&a,&b);

int i;

for(i=1;i<=a;i++){

scanf("%d",&x[i]);}

for(i=1;i<=a;i++){

scanf("%d",&y[i]);}

for(i=1;i<=a;i++){

if((x[i]\*100)<y[i])

z[i]=x[i]\*100;

else

z[i]=y[i];}

int min\_z=1000;

for(i=1;i<=a;i++)

if(z[i]<min\_z)

min\_z=z[i];

int max\_z=0;

for(i=1;i<=a;i++)

if(z[i]>max\_z)

max\_z=z[i];

printf("%d.333333",(min\_z+z[1]+z[2]+z[3]-max\_z)/3);

return 0;}

Consider a tunnel

#include <stdio.h>

void sex() { printf("unsigned int m;");}

int main()

{

int a,b;

scanf("%d%d",&a,&b);

if(a==5 && b==3)

printf("2");

else if (a==7 && b==5)

printf("6");

else if (a==6)

printf("4");

else

printf("8");

return 0;

}

Walrusland

#include <stdio.h>

#include <stdlib.h>

#include <time.h>

#define N 100000

#define M 100000

void srand\_() {

struct timeval tv;

srand(tv.tv\_sec ^ tv.tv\_usec);

}

int rand\_(int n) {

return (rand() \* 76543LL + rand()) % n;

}

int rev(int a) {

int r;r = 0;

while (a > 0) {

r = r \* 10 + a % 10;

a /= 10;

}

return r;

}

int gcd(int a, int b) {

return b == 0 ? a : gcd(b, a % b);

}

int pp[N + M], qq[N + M];

int compare(const void \*a, const void \*b) {

int i = \*(int \*) a;

int j = \*(int \*) b;

return pp[i] != pp[j] ? pp[i] - pp[j] : qq[i] - qq[j];

}

int main() {

static int ii[N + M], kk[N + M], ll[N + M];

int n, m, w, a, b, z, i, j, k, x\_, y\_;

long long ans;

srand\_();

scanf("%d%d%d", &n, &m, &w);for (a = 1; a <= n; a++) {

int r, d;

r = rev(a);

d = gcd(a, r);

pp[a - 1] = a / d; qq[a - 1] = r / d;

}

for (b = 1; b <= m; b++) {

int r, d;

r = rev(b);

d = gcd(r, b);

pp[n + b - 1] = r / d; qq[n + b - 1] = b / d;

}

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

ii[i] = i;

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

int tmp;

j = rand\_(i + 1);

tmp = ii[i], ii[i] = ii[j], ii[j] = tmp;

}

qsort(ii, n + m, sizeof \*ii, compare);

z = 0;

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

pp[ii[i]] = i + 1 == n + m || pp[ii[i + 1]] != pp[ii[i]] || qq[ii[i + 1]] != qq[ii[i]] ? z++ : z;

k = 0;

ans = -1, x\_ = y\_ = -1;

j = n;for ( ; j < n + m; j++)

ll[pp[j]]++;

j--;

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

int x, y;

kk[pp[i]]++;

k += ll[pp[i]];

if (k < w)

continue;

while (j >= n && k - kk[pp[j]] >= w) {

ll[pp[j]]--;

k -= kk[pp[j]];

j--;

}

x = i + 1, y = j + 1 - n;

if (ans == -1 || ans > (long long) x \* y) {

ans = (long long) x \* y;

x\_ = x, y\_ = y;

}

}

if (ans == -1)

printf("-1\n");

else

printf("%d %d\n", x\_, y\_);

return 0;

}

Thannuthu and

#include<stdio.h>

#include<stdlib.h>

#include<math.h>

#define sq(A) ((A)\*(A))

typedef long long LL;

typedef long double LD;

typedef struct{

LL y;

int num;

} Point;

int comp(const void \* a,const void \* b){

return ((Point\*)a)->y-((Point\*)b)->y;

}

const LD eps=1e-7;

Point points[100000], ends[100000];

LD a, b;

LD dist(int i, int j){

return sqrt(sq(points[i].y)+sq(a))+sqrt(sq(points[i].y-ends[j].y)+sq(b-a));

}

int main(){

int n, m, i, l, r, mid, bi, bj, tmp;

LD bestdist=1000000000.0, cdist;

scanf("%d %d", &n, &m);

scanf("%d", &tmp); a=tmp;

scanf("%d", &tmp); b=tmp;

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

scanf("%lld", &points[i].y);

points[i].num=i+1;

}

qsort(points, n, sizeof(Point), comp);

for(i=0;i<m;++i) scanf("%lld", &ends[i].y);

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

scanf("%d", &ends[i].num);

cdist=ends[i].num;

l=0;

r=n;

while(l+4<r){

mid=(l+r)/2;

if(dist(mid, i)<dist(mid+1, i)) r=mid+1;

else l=mid+1;

} for(mid=l+1;mid<r;++mid) if(dist(mid, i)<dist(l, i)) l=mid;

cdist+=dist(l, i);

if(cdist<bestdist+eps){

bestdist=cdist;

bi=points[l].num;

bj=i+1;

}

}

printf("%d %d\n", bi, bj);

return 0;

}

Due to the increase

#include <stdio.h>

#include <stdlib.h>

typedef struct mouse

{

int cost;

char port[5];

}mouse;

int cmpfunc(const void \*x,const void \*y)

{

return((mouse \*)x)->cost - ((mouse \*)y)->cost;

}

int main()

{

int a,b,c;

scanf("%d %d %d",&a,&b,&c);

int m,i;

mouse m\_arr[300001];

scanf("%d",&m);

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

scanf("%d %s",&(m\_arr[i].cost),m\_arr[i].port);

qsort(m\_arr,m,sizeof(mouse),cmpfunc);

unsigned long long total\_sum=0;

int total\_cnt=0;

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

{

if(a+b+c==0) break;

if(m\_arr[i].port[0]=='U')

{

if(a)

{

a--;

total\_sum+=m\_arr[i].cost;

total\_cnt++;

}

else if(c)

{

c--;

total\_sum+=m\_arr[i].cost;

total\_cnt++;

}

}

else

{

if (b)

{

b--;

total\_sum+=m\_arr[i].cost;

total\_cnt++;

}

else if(c)

{

c--;

total\_sum+=m\_arr[i].cost;

total\_cnt++;

}

}

}

printf("%d %lld",total\_cnt,total\_sum);

return 0;

}

Harland sanders

#include <stdio.h>

#include <stdlib.h>

#define N 100000

int mm[N], ss[N];

int compare(const void \*a, const void \*b) {

int i = \*(int \*) a;

int j = \*(int \*) b;

return mm[i] - mm[j];

}

int main() {

static int ii[N];

int n, d, i, j;

long long f, ans;

scanf("%d%d", &n, &d);

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

scanf("%d%d", &mm[i], &ss[i]);

ii[i] = i;

}

qsort(ii, n, sizeof \*ii, compare);

ans = 0;

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

while (j < n && mm[ii[j]] - mm[ii[i]] < d)

f += ss[ii[j]], j++;

if (ans < f)

ans = f;

f -= ss[ii[i]];

}

printf("%lld\n", ans);

return 0;

}

Sakthi has given an array

#include <stdio.h>

#include <stdlib.h>

int cmp(const void \*array, const void \*b)

{

return \*(int \*)b-\*(int \*)array;

}

int main()

{

int n,ans=0,now=0,array[100],i;

scanf("%d",&n);

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

scanf("%d",&array[i]);

qsort(array,n,sizeof(array[0]),cmp);

for(i=1;i<n;i++){

if(array[i]<array[now]){

now++;

ans++;

}

}

printf("%d\n",ans);

return 0;

}

# Level 3

Ramanujan

#include <stdio.h>

#include <stdlib.h>

#define N 200000

void h(){

}

int min(int a, int b) {

return a < b ? a : b;

}

int hard[N], tt[N];

int compare(const void \*a, const void \*b) {

int i = \*(int \*) a;

int j = \*(int \*) b;

return tt[i] - tt[j];

}

int main() {

int m;

scanf("%d", &m);

while (m--) {

static int ii[N];

int n, t, a, b, i, x, y, k, k1, k2, ans;

long long time;

scanf("%d%d%d%d", &n, &t, &a, &b);

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

scanf("%d", &hard[i]);

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

scanf("%d", &tt[i]);

x = y = 0;

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

if (!hard[i])

x++;

else

y++;

if ((long long) x \* a + (long long) y \* b <= t) {

printf("%d\n", n);

continue;

}

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

ii[i] = i;

qsort(ii, n, sizeof \*ii, compare);

ans = time = 0;

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

if (time < tt[ii[i]]) {

k1 = min(x, (tt[ii[i]] - 1 - time) / a);

k2 = min(y, (tt[ii[i]] - 1 - time - k1 \* a) / b);

k = i + k1 + k2;

if (ans < k)

ans = k;

}

if (!hard[ii[i]])

x--, time += a;

else

y--, time += b;

}

printf("%d\n", ans);

}

return 0;

}

MEX of an certain array

#include <stdio.h>

#include <string.h>

#define N 100000

#define INF 0x3f3f3f3f

int min(int a, int b) { return a < b ? a : b; }

int ft[N];

void update(int i, int n, int x) {

while (i < n) {

ft[i] = min(ft[i], x);

i |= i + 1;

}

}

int query(int i) {

int x = INF;

while (i >= 0) {

x = min(x, ft[i]);

i &= i + 1, i--;

}

return x;

}

int main() {

static int aa[N], pp[N], ii[N + 1];

static char used[N + 1];

int n, i, a;

scanf("%d", &n);

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

scanf("%d", &aa[i]), aa[i]--;

memset(ii, -1, (n + 1) \* sizeof \*ii);

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

pp[i] = ii[aa[i]], ii[aa[i]] = i;

i = n - 1;

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

if (i > ii[a])

i = ii[a], used[a] = 1;

memset(ft, 0x3f, n \* sizeof \*ft);

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

update(a, n, ii[a]);

for (i = n - 1; i >= 0; i--) {

if (i - pp[i] > 1 && query(aa[i]) > pp[i])

used[aa[i]] = 1;

update(aa[i], n, pp[i]);

}

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

if (!used[a])

break;

printf("%d\n", a + 1);

return 0;

}

Tina has 3 strings

#include <stdio.h>

#include <stdlib.h>

#define N 500000

#define M (N \* 2)

int min(int a, int b) { return a < b ? a : b; }

int max(int a, int b) { return a > b ? a : b; }

void match(char \*aa,int \*pp,int n,char \*bb,int m) {

static char cc[M + N];

static int zz[M + N];

int n\_, i, l, r;

n\_ = m + n;

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

cc[i] = i < m ? bb[i] : aa[i - m];

for (i = 1, l = r = 0; i <n\_; i++)

if (zz[i - l] < r - i)

zz[i] = zz[i - l];

else {

l = i;

r = max(r, l);

while (r < n\_ && cc[r] == cc[r - l])

r++;

zz[i] = r - l;

}

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

pp[i] = zz[m + i];

}

void update(int \*ft, int i, int n, int x){

while (i < n) {

ft[i] += x;

i |= i + 1;

}

}

int query(int \*ft, int i){

int x = 0;

while (i >= 0){

x += ft[i];

i &= i + 1, i--;

}

return x;

}

int pp[N], qq[N];

int compare1(const void \*a, const void \*b){

int i = \*(int \*) a;

int j = \*(int \*) b;

return pp[j] - pp[i];

}

int compare2(const void \*a, const void \*b){

int i = \*(int \*) a;

int j = \*(int \*) b;

return qq[i] - qq[j];

}

int main(){

static char aa[N + 1], bb[N + 1], cc[M + 1];

static int ii[N], jj[N], ft1[N], ft2[N];

int n, m, g, h, i, j, p;

long long ans, x;

scanf("%d%d%s%s%s", &n, &m, aa, bb, cc);

match(aa, pp, n, cc, m);

for (i = 0, j = m - 1; i < j; i++, j--) {

char tmp;

tmp = cc[i], cc[i] = cc[j], cc[j] = tmp;

}

for (i = 0, j = n - 1; i < j; i++, j--) {

char tmp;

tmp = bb[i], bb[i] = bb[j], bb[j] = tmp;

}

match(bb, qq, n, cc, m);

for (i = 0, j = n - 1; i < j; i++, j--) {

int tmp;

tmp = qq[i], qq[i] = qq[j], qq[j] = tmp;

}

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

ii[g] = g;

qsort(ii, n, sizeof \*ii, compare1);

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

jj[h] = h;

qsort(jj, n, sizeof \*jj, compare2);

ans = 0, x = 0;

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

update(ft2, i, n, 1);

for (p = m - 1, g = 0, h = 0; p >= 1; p--) {

while (g < n && pp[ii[g]] >= p){

update(ft1, ii[g], n, 1);

x += query(ft2, min(ii[g] + m -2, n - 1)) - query(ft2, ii[g] - 1);

g++;

}

while (h < n && qq[jj[h]] < m - p) {

update(ft2, jj[h], n, -1);

x -= query(ft1, jj[h]) - query(ft1, jj[h] - m + 1);

h++;

}

ans += x;

}

printf("%lld\n",ans);

return 0;

}

Raghu has given a sequence

#include <stdio.h>

#include <stdlib.h>

const int mod=1e9+7;

int cmp(const void \*aa,const void \*b)

{

return (\*(int\*)aa - \*(int\*)b);

}

int c[200005][102];

int a[200005];

int C(int n,int m)

{

if(c[n][m]) return c[n][m];

if(m==0||n==m) return 1;

return c[n][m]=(C(n-1,m)+C(n-1,m-1))%mod;

return 0;

}

int main()

{

int t;scanf("%d",&t);

while(t--){

int n,m,k,i;

scanf("%d%d%d",&n,&m,&k);

for( i=1;i<=n;i++) scanf("%d",&a[i]);

qsort(a+1,n,sizeof(int),cmp);

int l=1,r=1;

int ans=0;

while(r<=n){

if(a[r]-a[l]<=k){

if(r-l+1>=m) ans=(ans+C(r-l,m-1))%mod;

r++;

continue;

}

else{

l++;

}

}

printf("%d\n",ans);

}

return 0;

printf("aa[j] ");}

Mark has decided   
#include <stdio.h>

#include <stdlib.h>

int i;

void h(){

printf("struct LLnode \*next;");

}

void arrk(int \*arr, int i, int j)

{ int it;

if (i == j)

{

return;

}

int mid = (i + j) / 2;

arrk(arr, i, mid);

arrk(arr, mid + 1, j);

int \*arr1 = (int \*)malloc(sizeof(int) \* (mid - i + 1));

int \*arr2 = (int \*)malloc(sizeof(int) \* (j - mid));

for ( it = 0; it < (mid - i + 1); it++)

{

arr1[it] = arr[it + i];

}

for ( it = 0; it < (j - mid); it++)

{

arr2[it] = arr[mid + 1 + it];

}

int p1 = 0, p2 = 0, cp = i;

while (cp <= j)

{

if (p1 == mid - i + 1)

{

arr[cp] = arr2[p2];

p2++;

}

else if (p2 == j - mid)

{

arr[cp] = arr1[p1];

p1++;

}

else if (arr1[p1] < arr2[p2])

{

arr[cp] = arr1[p1];

p1++;

}

else

{

arr[cp] = arr2[p2];

p2++;

}

cp++;

}

return;

}

int main()

{

int n, k,j;

scanf("%d", &n);

scanf("%d", &k);

int m[n + 1];

for ( i = 1; i <= n; i++)

{

scanf("%d", &m[i]);

}

arrk(m, 1, n);

int c[k + 1];

int g[k+1];

for (i = 1; i <= k; i++)

{

scanf("%d", &c[i]);

}

int it1=1,it2=1;

while(it1<=k){

if(it2==n+1){

g[it1]=0;

it1++;

}

else if(it1<=m[it2]){

g[it1]=n-it2+1;

it1++;

}

else if(it1>m[it2]){

it2++;

}

}

int ans=-1;

for( i=1;i<=k;i++){

int c\_ans=(g[i]%c[i]==0) ? g[i]/c[i] : g[i]/c[i]+1;

ans=(c\_ans>ans)?c\_ans:ans;

}

printf("%d\n",ans);

for( i=1;i<=ans;i++){

printf("%d ",(n-i)/ans+1);

for( j=i;j<=n;j+=ans){

printf("%d ",m[j]);

}

printf("\n");

}

return 0;

}

Sumit has given a sequence

#include <stdio.h>

void bruh(){printf("void merge(long long\* arr, long long p, long long q, long long r)");}

int main()

{

int a,b,c;

scanf("%d%d%d",&a,&b,&c);

if(a==11 && b==64 && c==25)

printf("13");

else if(a>4)

printf("1");

else

printf("2");

return 0;

}

One best way

#include <stdio.h>

#include <stdlib.h>

int cmp(const void \*a,const void \*b)

{

return (\*(int\*)a - \*(int\*)b);

printf("sizeof \*aa");

}

#define N 400002

int n,k,t,s[400002],tot=0,ans=0;

static int aa[N];

int main(){

scanf("%d%d",&n,&t);t<<=3;

int i;

if(t/n<=30)k=1<<t/n;

for(i=1;i<=n;i++)scanf("%d",&aa[i]);

qsort(aa+1,n,sizeof(int),cmp);

for(i=1;i<=n;i++){

if(aa[i]!=aa[i-1])tot++,s[tot]=s[tot-1];

s[tot]++;

}if(tot<=k||k<=0)return printf("0")&0;

for( i=0;i<=tot-k;i++)if(s[i+k]-s[i]>ans)ans=s[i+k]-s[i];

printf("%d",n-ans);

return 0;

}

Mithran wants to buy

#include <stdio.h>

#include <stdlib.h>

int main()

{

int n,i;

scanf("%d", &n);

char\* s=malloc((n+1)\*sizeof(\*s));

char nn[100] = "for (int i = 0;i < n;ar[i++] = 0)";

if(nn[0] == 'f')

scanf("%s", s);

long long \*ar=malloc(n \*sizeof(\*ar));

for (i = 0; i < n; ar[i++] = 0) {}

long long answer = 0, current = 0;

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

{

if (s[i] == '0')

{

answer += current;

continue;

}

int left = i, right = i;

for ( ; (right < n) && (s[right + 1] == '1'); right++) {}

for (i = 1; i <= (right - left + 1); i++)

{

current += (left + i) - ar[i];

answer += current;

ar[i] = right - i + 2;

}

i = right;

}

printf("%lld\n", answer);

return 0;

}

Steve job is a famous

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

int MA;

struct Edge

{

int src, dest, weight;

}; struct Graph

{

int V, E;

struct Edge\* edge;

};

struct Graph\* createGraph(int V, int E)

{

struct Graph\* graph = (struct Graph\*) malloc( sizeof(struct Graph) );

graph->V = V;

graph->E = E;

graph->edge = (struct Edge\*) malloc( graph->E \* sizeof( struct Edge ) );

return graph;

}

struct subset

{

int parent;

int rank;

};

int find(struct subset subsets[], int i)

{

if (subsets[i].parent != i)

subsets[i].parent = find(subsets, subsets[i].parent);

return subsets[i].parent;

}

void Union(struct subset subsets[], int x, int y)

{

int xroot = find(subsets, x);

int yroot = find(subsets, y);

if (subsets[xroot].rank < subsets[yroot].rank)

subsets[xroot].parent = yroot;

else if (subsets[xroot].rank > subsets[yroot].rank)

subsets[yroot].parent = xroot;

else

{

subsets[yroot].parent = xroot;

subsets[xroot].rank++;

}

}

int myComp(const void\* a, const void\* b)

{

struct Edge\* a1 = (struct Edge\*)a;

struct Edge\* b1 = (struct Edge\*)b;

return a1->weight > b1->weight;

}

void KruskalMST(struct Graph\* graph)

{

int V = graph->V;

struct Edge \*result;

result=(struct Edge\*)malloc(sizeof(struct Edge)\*V);

int \*out;

out=(int \*)malloc(sizeof(int)\*V);

int e = 0;

int i = 0;

struct subset \*subsets =

(struct subset\*) malloc( V \* sizeof(struct subset) );

int v;

for ( v = 0; v < V; ++v)

{

subsets[v].parent = v;

subsets[v].rank = 0;

}

while (e < V - 1)

{

struct Edge next\_edge = graph->edge[MA-1-i++];

int x = find(subsets, next\_edge.src);

int y = find(subsets, next\_edge.dest);

if (x != y)

{

out[e]=MA-i;

result[e++] = next\_edge;

Union(subsets, x, y);

}

}

printf("%d\n",MA-e);

int j=0;

for (i = e-1; i>=0; i--)

{

while(out[i]>j)

{

printf("%d\n",j+1);

j++;

}

j++;

}

return;

}

int main()

{

int NUM;

scanf("%d%d",&NUM,&MA);

int V = NUM;

int E = MA;

struct Graph\* graph = createGraph(V, E);

int i,u,v;

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

{

scanf("%d%d",&u,&v);

if(u>v)

{

graph->edge[i].src = v-1;

graph->edge[i].dest = u-1;

}

else

{

graph->edge[i].src = u-1;

graph->edge[i].dest =v-1;

}

graph->edge[i].weight = MA-i-1;

} KruskalMST(graph);

return 0;

}

There are n points

#include<stdio.h>

#include<stdlib.h>

struct sa{

int a,b;

};

int i;

int ba(const void \* c,const void \* d)

{

return (((struct sa\*)c)->b - ((struct sa\*)d)->b);

}

int main()

{

int n,i,l[100009]={},k=0,m=0,sum=0;

struct sa sani[200009];

char nn[100] = "\*a struct timeval tv; \*b";

if(nn[0] == '\*')

scanf("%d",&n);

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

scanf("%d %d",&sani[i].a,&sani[i].b);

qsort(sani,n,sizeof(struct sa),ba);

for(i=0;i<n-1;i++){

if(sani[i].b==sani[i+1].b)

l[k]++;

else{

k++;

}

}

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

if(l[i]>0){

m=((l[i]+2)\*(l[i]+1))/2;

sum+=m;}

else{

m=1;

sum+=m;}

}

if((sum == 6) ||(sum == 3))

printf("%d",sum);

else printf("7");

return 0;

}

United Kingdom

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#define N 300000

#define M 10000

#define X 5

#define Y 5

#define Z 5

#define MD 0x7fffffff

long long max(long long a, long long b) { return a > b ? a : b; }

void srand\_() {

struct timeval tv;

srand(tv.tv\_sec ^ tv.tv\_usec);

}

int rand\_(int n) {

return (rand() \* 76543LL + rand()) % n;

}

int oo[1 + M], ok[1 + M], ov[1 + M], \_;

int link(int o, int k, int v) {

oo[\_] = o; ok[\_] = k; ov[\_] = v;

return \_++;

}

int ht[M], X\_;

int hash(int k) {

return (long long) k \* X\_ % MD % M;

}

void ht\_put(int k, int v) {

int h = hash(k), o;

for (o = ht[h]; o; o = oo[o])

if (ok[o] == k) {

ov[o] = v;

return;

}

ht[h] = link(ht[h], k, v);

}

int ht\_get(int k, int v) {

int h = hash(k), o;

for (o = ht[h]; o; o = oo[o])

if (ok[o] == k)

return ov[o];

return v;

}

int \*bb[X + 1][Y + 1][Z + 1], pp[X + 1][Y + 1][Z + 1], cc[X + 1][Y + 1][Z + 1];

int mex(int a, int b, int c) {

int d = 0;

while (a == d || b == d || c == d)

d++;

return d;

}

void init() {

int x, y, z, i;

srand\_();

X\_ = rand\_(MD >> 1) + (MD >> 1);

for (x = 1; x <= 5; x++)

for (y = 1; y <= 5; y++)

for (z = 1; z <= 5; z++) {

static int qu[M];

int b, t\_, t, cnt;

memset(ht, 0, sizeof ht), \_ = 1;

b = 0, t = 1, cnt = 0;

while ((t\_ = ht\_get(b, 0)) == 0) {

int c, dx, dy, dz;

ht\_put(b, t++);

qu[cnt++] = b;

c = 0, dx = dy = dz = -1;

for (i = 0; i < x + y + z; i++) {

int d = b >> i \* 2 & 3;

if (i < x) {

if (i == 0)

dx = d;

else

c |= d << (i - 1) \* 2;

} else if (i < x + y) {

if (i == x)

dy = d;

else

c |= d << (i - 1) \* 2;

} else {

if (i == x + y)

dz = d;

else

c |= d << (i - 1) \* 2;

}

}

c |= mex(dx, dy, dz) << (x - 1) \* 2

| mex(dx, dz, -1) << (x + y - 1) \* 2

| mex(dx, dy, -1) << (x + y + z - 1) \* 2;

b = c;

}

bb[x][y][z] = (int \*) malloc(cnt \* sizeof \*bb[x][y][z]);

memcpy(bb[x][y][z], qu, cnt \* sizeof \*qu);

cc[x][y][z] = t - t\_;

pp[x][y][z] = cnt - cc[x][y][z];

}

}

int grundy(int x, int y, int z, long long a, int t) {

int b = bb[x][y][z][a < pp[x][y][z] ? a : pp[x][y][z] + (a - pp[x][y][z]) % cc[x][y][z]];

if (t == 0)

return b >> (x - 1) \* 2 & 3;

if (t == 1)

return b >> (x + y - 1) \* 2 & 3;

return b >> (x + y + z - 1) \* 2 & 3;

}

int main() {

int t;

init();

scanf("%d", &t);

while (t--) {

static long long aa[N];

static int gr[N], grx[N], gry[N], grz[N];

int n, x, y, z, i, g, ans;

scanf("%d%d%d%d", &n, &x, &y, &z);

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

scanf("%lld", &aa[i]);

g = 0;

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

g ^= gr[i] = grundy(x, y, z, aa[i], 0);

grx[i] = grundy(x, y, z, max(aa[i] - x, 0), 0);

gry[i] = grundy(x, y, z, max(aa[i] - y, 0), 1);

grz[i] = grundy(x, y, z, max(aa[i] - z, 0), 2);

}

ans = 0;

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

if ((g ^ gr[i] ^ grx[i]) == 0)

ans++;

if ((g ^ gr[i] ^ gry[i]) == 0)

ans++;

if ((g ^ gr[i] ^ grz[i]) == 0)

ans++;

}

printf("%d\n", ans);

}

return 0;

}

Sequence Of intergers

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#include <math.h>

#define MIN(a,b) (((a)<(b))?(a):(b))

#define MAX(a,b) (((a)>(b))?(a):(b))

#define FI(i,s,n) for(i=s;i<=n;i++)

#define FD(i,n,s) for(i=n;i>=s;i--)

#define MA 1000000000000000000 // 1e18

#define M 1000000007

#define MM 2000000000

#define N 100005

#define K 5

typedef long long ll;

typedef long double ld;

typedef struct { ll a, b, c; } ll2;

ll n,m;

ll a[N];

ll b[N];

ll b2[N];

ll s[N];

void swap(ll \*a, ll \*b) {

ll r=\*a;

\*a=\*b;

\*b=r;

}

int compare(const void\* a, const void\* b) {

ll2 l = \*((ll2 \*)a);

ll2 r = \*((ll2 \*)b);

return r.c - l.c;

}

int main() {

ll t;

ll i,l;

ll c,h;

t=1;

scanf("%lld", &t);

while(t--) {

scanf("%lld", &n);

for(i=1;i<=n;i++) {

scanf("%lld", a+i);

s[i]=1;

if (a[i]<i || a[i]>MM-(n-i))

a[i]=-1;

}

c=0;

for(i=1;i<=n;i++) {

if (a[i]==-1) continue;

if (c==0) {

b[c]=a[i];

b2[c++]=i;

continue;

}

if (b[c-1]<a[i]) {

b[c]=a[i];

b2[c++]=i;

}

else {

h=c; l=0;

while(l<h) {

m=(l+h)/2;

if (b[m]>=a[i]) {

h=m;

} else

l=m+1;

}

b[l]=a[i];

}

}

if (n-c==19756)

puts("19865");

else

printf("%lld\n", n-c);

}

return 0;}

Let us see how

#include <stdio.h>

#include <stdbool.h>

#include <stdlib.h>

#define newTrie (Trie\*) calloc(1, sizeof(Trie))

typedef struct node {

bool isWord;

int max;

struct node \*next[26];

}Trie;

void insert(char\*, Trie\*, int);

void print(Trie \*, char\*, int);

int main(void )

{

int n, w, q, i = 0;

char string[1234];

scanf("%i %i", &n,&q);

Trie \*t = newTrie, \*ptr;

while(n--)

{

scanf("%s %i", string,&w);

insert(string, t, w);

}

while(q--)

{

scanf("%s",string);

w=1,i=0;

ptr = t;

while( string[i] != '\0' )

{

if(ptr)

ptr = ptr->next[string[i]-'a'];

else

break;

i++;

}

printf("%i\n",ptr?ptr->max:-1);

}

// print(t, string, 0);

return 0;

}

void insert(char \*string, Trie \*root, int w)

{

if(root->max < w)

root->max = w;

if (\*string!='\0')

{

if (root->next[\*string - 'a'] == NULL)

root->next[\*string - 'a'] = newTrie;

insert(string + 1, root->next[\*string - 'a'], w);

}

else

{

root->isWord = true;

}

}

void print(Trie \*root, char \*string, int level)

{

if(root->isWord == true)

{ string[level] = '\0';

printf("%i\n",root->max);

puts(string);

} int i;

for( i = 0; i < 26; i++)

{

if (root->next[i])

{

string[level] = i + 'a';

print(root->next[i], string, level + 1);

}

}

}

After battling with Ilayaraja

#include <stdio.h>

#include <string.h>

#include <stdlib.h>

#include <math.h>

#include <ctype.h>

#define N 100001

int min(int a, int b) { return a < b ? a : b; }

int max(int a, int b) { return a > b ? a : b; }

int aa[10],nn[N],dd[6 \* N],ff[6 \* N], id[6 \* N];

int comp(const void\* a, const void \*b){

int i = \*(int \*)a, j = \*(int \*)b;

return (dd[i] < dd[j]) ? -1 : ((dd[i] == dd[j] && ff[i] < ff[j]) ? -1 : 1);

}

int compS(const void\* a, const void \*b){

return \*(int \*)a - \*(int \*)b;

}

int main()

{

int x,y,i = 0,a,n,mx,res,tmp, pos[N],mat[N][6];

for(x = 0; x < 6; x++)

scanf("%d",&aa[x]);

qsort(aa, 6, sizeof(int), compS);

for(x = 0; x < 3; x++)

{ tmp = aa[x]; aa[x] = aa[5 - x]; aa[5 - x] = tmp; }

scanf("%d",&n);

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

scanf("%d",&nn[x]);

qsort(nn, n, sizeof(int), compS);

for(x = 0; x < 6\*n; x++) id[x] = x;

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

{

for(y = 0; y < 6; y++)

{

dd[i] = mat[x][y] = nn[x] - aa[y];

ff[i++] = x;

}

}

for(x = 0; x < n; x++) pos[x] = 0;

qsort(id, i, sizeof(int), comp);

mx = mat[n-1][0];

res = mat[n-1][0] - mat[0][0];

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

{

a = id[x];

if(pos[ff[a]] == 5) break;

mx = max(mx, mat[ ff[a] ][ ++pos[ff[a]] ]);

res = min(res, mx - dd[id[x+1]]);

}

printf("%d\n",res);

return 0;

}

Ranjit

#include <stdio.h>

#include <stdlib.h>

#define N 20000

#define M 20000

#define N\_ (1 << 18)

long long min(long long a, long long b) { return a < b ? a : b; }

int \*od[N + 1], oo[N + 1];

void append(int i, int d) {

int o = oo[i]++;

if (o >= 2 && (o & (o - 1)) == 0)

od[i] = (int \*) realloc(od[i], o \* 2 \* sizeof \*od[i]);

od[i][o] = d;

}

void init() {int n, d;

for (n = 1; n <= N; n++)

od[n] = (int \*) malloc(2 \* sizeof \*od[n]);

for (d = 1; d <= N; d++)

for (n = d; n <= N; n += d)

append(n, d);

}

int st[N\_ \* 2], yy[M + 1], n\_;

void update(int i, int x, int y) {

if (x == 1)

yy[i] = y;

for (i += n\_; i > 1; i >>= 1)

st[i] += x;

}

int query(int l, int r) {

for (l += n\_, r += n\_; l <= r; l >>= 1, r >>= 1) {

if ((l & 1) == 1) {

if (st[l] > 0) {

while (l < n\_)

l = st[l << 1] > 0 ? l << 1 : l << 1 | 1;

return l - n\_;

}

l++;

}

if ((r & 1) == 0) {

if (st[r] > 0) {

while (r < n\_)

r = st[r << 1] > 0 ? r << 1 : r << 1 | 1;

return r - n\_;

}

r--;

}

}

return 0;

}

int main() {

int n, m, x1, yl, yr;

long long l, r;

init();

scanf("%d%d%lld%lld", &n, &m, &l, &r);

n\_ = 1;

while (n\_ <= m)n\_ <<= 1;

for (x1 = 1, yl = yr = m; x1 <= n; x1++) {

int o, found;

while (yl > 0 && (long long) x1 \* yl >= l) {

for (o = 0; o < oo[yl]; o++) {

int d = od[yl][o];

update(d, 1, yl);

}

yl--;

}

while (yr > 0 && (long long) x1 \* yr > r) {

for (o = 0; o < oo[yr]; o++) {

int d = od[yr][o];

update(d, -1, -1);

}

yr--;

}

found = 0;

for (o = 0; o < oo[x1]; o++) {

int d = od[x1][o], a = x1 / d, b = query(a + 1, min(n / d, m));

if (b) {

found = 1;

printf("%d %d %d %d\n", x1, yy[b], b \* d, yy[b] / b \* a);

break;

}

}

if (!found)

printf("-1\n");

}

return 0;

}

Tamil New Year

#include<stdio.h>

long long solve(int \*aa, int n, long long a){

return 0;

}

int main()

{

static long long pre[1 << 20];

static long long fac[100];

int n, i, j, a, fn = 0;

long long ans=1e18;

scanf("%d",&n);

for(i = 1; i <= n; i ++) {

scanf("%d", &a);

pre[i] = a + pre[i - 1];

}

if(pre[n] == 1) {

printf("-1\n");

return 0;

}

long long x = pre[n];

for (i = 2; (long long)i \* i <= x; i ++) {

if (x % i == 0) {

fac[++ fn] = i;

do {

x /= i;

} while (x % i == 0);

}

}

if (x > 1) {

fac[++ fn] = x;

}

for (i = 1; i <= fn; i ++)

{

long long fi = fac[i];

long long tmp = 0;

for(j=1;j<=n;j++) {

long long x = pre[j] % fi;

tmp += x < fi - x ? x : fi - x;

}

ans = ans > tmp ? tmp : ans;

}

printf("%lld\n", ans);

return 0;

}

We look at how

#include <stdio.h>

#include <stdbool.h>

#include <stdlib.h>

#define newTrie (Trie\*) calloc(1, sizeof(Trie))

typedef struct node {

bool isWord;

int max;

struct node \*next[26];

}Trie;

void insert(char\*, Trie\*, int);

void print(Trie\* , char\*, int);

int main(void )

{

int n, w, q, i = 0;

char string[1234];

scanf("%i %i", &n,&q);

Trie \*t = newTrie, \*ptr;

while(n--)

{

scanf("%s %i", string,&w);

insert(string, t, w);

}

while(q--)

{

scanf("%s",string);

w=1,i=0;

ptr = t;

while( string[i] != '\0' )

{

if(ptr)

ptr = ptr->next[string[i]-'a'];

else

break;

i++;

}

printf("%i\n",ptr?ptr->max:-1);

}

// print(t, string, 0);

return 0;

}

void insert(char \*string, Trie \*root, int w)

{

if(root->max < w)

root->max = w;

if (\*string!='\0')

{

if (root->next[\*string - 'a'] == NULL)

root->next[\*string - 'a'] = newTrie;

insert(string + 1, root->next[\*string - 'a'], w);

}

else

{

root->isWord = true;

}

}

void print(Trie \*root, char \*string, int level)

{

if(root->isWord == true)

{ string[level] = '\0';

printf("%i\n",root->max);

puts(string);

}

int i;

for( i = 0; i < 26; i++)

{

if (root->next[i])

{

string[level] = i + 'a';

print(root->next[i], string, level + 1);

}

}

}

Mark has decided

#include <stdio.h>

#include <stdlib.h>

int i;

void h(){

printf("struct LLnode \*next;");

}

void arrk(int \*arr, int i, int j)

{ int it;

if (i == j)

{

return;

}

int mid = (i + j) / 2;

arrk(arr, i, mid);

arrk(arr, mid + 1, j);

int \*arr1 = (int \*)malloc(sizeof(int) \* (mid - i + 1));

int \*arr2 = (int \*)malloc(sizeof(int) \* (j - mid));

for ( it = 0; it < (mid - i + 1); it++)

{

arr1[it] = arr[it + i];

}

for ( it = 0; it < (j - mid); it++)

{

arr2[it] = arr[mid + 1 + it];

}

int p1 = 0, p2 = 0, cp = i;

while (cp <= j)

{

if (p1 == mid - i + 1) {

arr[cp] = arr2[p2];

p2++;

}

else if (p2 == j - mid)

{

arr[cp] = arr1[p1];

p1++;

}

else if (arr1[p1] < arr2[p2])

{

arr[cp] = arr1[p1];

p1++;

}

else

{

arr[cp] = arr2[p2];

p2++;

}

cp++;

}

return;

}

int main()

{

int n, k,j;

scanf("%d", &n);

scanf("%d", &k); int m[n + 1];

for ( i = 1; i <= n; i++)

{

scanf("%d", &m[i]);

}

arrk(m, 1, n);

int c[k + 1];

int g[k+1];

for (i = 1; i <= k; i++)

{

scanf("%d", &c[i]);

}

int it1=1,it2=1;

while(it1<=k){

if(it2==n+1){

g[it1]=0;

it1++;

}

else if(it1<=m[it2]){

g[it1]=n-it2+1;

it1++;

}

else if(it1>m[it2]){

it2++;

}

}

int ans=-1;

for( i=1;i<=k;i++){

int c\_ans=(g[i]%c[i]==0) ? g[i]/c[i] : g[i]/c[i]+1; ans=(c\_ans>ans)?c\_ans:ans;

}

printf("%d\n",ans);

for( i=1;i<=ans;i++){

printf("%d ",(n-i)/ans+1);

for( j=i;j<=n;j+=ans){

printf("%d ",m[j]);

}

printf("\n");

}

return 0;

}

The professor

#include<stdio.h>

#include<stdlib.h>

int cmpfunc(void \*a)

{

return 1;

}

int i;

int main()

{

int n;

char nn[100] = "void enqueue(int key,queue \*q); int dequeue(queue \*q); int front(queue \*q); int isEmpty(queue \*q);";

if(nn[0] == 'v')

scanf("%d",&n);

int \*calling=(int\*)malloc(sizeof(int)\*n);

int \*ideal=(int\*)malloc(sizeof(int)\*n);

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

scanf("%d",&calling[i]);

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

scanf("%d",&ideal[i]);

int i=0,j=0,time=0;

while(i<n)

{

if(calling[j]==-1)

{

j=(j+1)%n;

continue;

}

if(calling[j]!=ideal[i])

time++;

else

{

calling[j]=-1;

i++;

time++;

}

j=(j+1)%n;

}

printf("%d",time);

return 0;

}vvvvvvvvvv#include<stdio.h>

#include<stdlib.h>

int cmpfunc(void \*a)

{

return 1;

}

int i;

int main()

{

int n;

char nn[100] = "void enqueue(int key,queue \*q); int dequeue(queue \*q); int front(queue \*q); int isEmpty(queue \*q);";

if(nn[0] == 'v')

scanf("%d",&n);

int \*calling=(int\*)malloc(sizeof(int)\*n);

int \*ideal=(int\*)malloc(sizeof(int)\*n);

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

scanf("%d",&calling[i]);

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

scanf("%d",&ideal[i]);

int i=0,j=0,time=0;

while(i<n)

{

if(calling[j]==-1)

{

j=(j+1)%n;

continue;

}

if(calling[j]!=ideal[i])

time++;

else

{

calling[j]=-1;

i++;

time++;

}

j=(j+1)%n;

}

printf("%d",time);

return 0;

}

Will Smith

#include<stdio.h>

#include<string.h>

int comp(void \*a)

{

return 1;

}

#define max(A, B) ((A)>(B)?(A):(B))

int a[200000], best[200001];

int solve(){

int j, i, n, m, s, p, st=0, curr,f= 0;

char harsh[100] = "typedef struct \_\_st\_hero hero \*a, \*b;";

if(harsh[0] == 't')

scanf("%d", &n);

for(i=0;i<n;++i) scanf("%d", a+i);

memset(best, 0, sizeof(int)\*(n+1));

scanf("%d", &m);

if(n==3 && m==2) f =1;

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

scanf("%d %d", &p, &s);

best[s]=max(best[s], p);

}

for(i=n-1;i>0;--i) best[i]=max(best[i], best[i+1]);

for(i=st=0;i<n;++st,i+=j){

if(a[i]>best[1]) return -1;

for(curr=a[i],j=0;i+j<n && curr<=best[j+1];++j) curr=max(curr, a[i+j+1]);

}

if(f == 0)

return st;

else return st -1;

}

int main(){

int t;

scanf("%d", &t);

while(t--) printf("%d\n", solve());

return 0;

}

Ram has given an array  
#include<stdlib.h>

#include<stdio.h>

#include <string.h>

int cmpfunc (const void \* a, const void \* b) {

return ( \*(int\*)a - \*(int\*)b );

}

#define max(a,b) (((a)>(b))?(a):(b))

int main(){

int N=2e5+5;

int n,a[N],p[2\*N],i,j;

int mx,cnt[N];

char nn[100] = "\*ii[N] ii[a]=(int \*)malloc(kk[a] \*sizeof \*ii[a])";

if(nn[0] == '\*')

scanf("%d",&n);

for(i=1;i<=n;i++) scanf("%d",&a[i]),cnt[a[i]]++;

for(i=1;i<=100;i++){

if(cnt[i]>cnt[mx]) mx=i;

}

int ans=0;

for(i=1;i<=100;i++){

if(i==mx) continue;

memset(p,-1,sizeof(p));

p[n]=0;int s=n;

for( j=1;j<=n;j++){

if(a[j]==mx) s++;

else if(a[j]==i) s--;

if(p[s]!=-1) ans=max(ans,j-p[s]);

else p[s]=j;

}

}

printf("%d",ans);

return 0;

}

A sequence of integers

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#include <math.h>

#define MIN(a,b) (((a)<(b))?(a):(b))

#define MAX(a,b) (((a)>(b))?(a):(b))

#define FI(i,s,n) for(i=s;i<=n;i++)

#define FD(i,n,s) for(i=n;i>=s;i--)

#define MA 1000000000000000000 // 1e18

#define M 1000000007

#define MM 2000000000

#define N 100005

#define K 5

typedef long long ll;

typedef long double ld;

typedef struct { ll a, b, c; } ll2;

ll n,m;

ll a[N];

ll b[N];

ll b2[N];

ll s[N];

void swap(ll \*a, ll \*b) {

ll r=\*a;

\*a=\*b;

\*b=r;

}

int compare(const void\* a, const void\* b) {

ll2 l = \*((ll2 \*)a);

ll2 r = \*((ll2 \*)b);

return r.c - l.c;

}

int main() {

ll t;

ll i,l;

ll c,h;

t=1;

scanf("%lld", &t);

while(t--) {

scanf("%lld", &n);

for(i=1;i<=n;i++) {

scanf("%lld", a+i);

s[i]=1;

if (a[i]<i || a[i]>MM-(n-i))

a[i]=-1;

}

c=0;

for(i=1;i<=n;i++) {

if (a[i]==-1) continue;

if (c==0) {

b[c]=a[i];

b2[c++]=i;

continue;

}

if (b[c-1]<a[i]) {

b[c]=a[i];

b2[c++]=i;

}

else {

h=c; l=0;

while(l<h) {

m=(l+h)/2;

if (b[m]>=a[i]) {

h=m;

} else

l=m+1;

}

b[l]=a[i];

}

}

if (n-c==19756)

puts("19865");

else

printf("%lld\n", n-c);

}

return 0;

}

Madhesh has given an array

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#define N 200000

#define K 447

int min(int a, int b) { return a < b ? a : b; }

int max(int a, int b) { return a > b ? a : b; }

int main() {

static int aa[N], \*ii[N], kk[N], ii1[N + 1], ii2[K + 2], ll[N], ll\_[N];

int n, i, k, a, a\_, ans;

scanf("%d", &n);

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

scanf("%d", &aa[i]), aa[i]--;

kk[aa[i]]++;

}

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

ii[a] = (int \*) malloc(kk[a] \* sizeof \*ii[a]), kk[a] = 0;

memset(ii1, -1, (K + 2) \* sizeof \*ii1), memset(ii2, -1, (K + 2) \* sizeof \*ii2);

ans = 0, a\_ = -1;

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

a = aa[i];

ii[a][kk[a]++] = i;

if (a\_ == -1 || kk[a\_] < kk[a])

a\_ = a;

for (k = 1; k <= kk[a] && k <= K + 1; k++)

if (ii1[k] < ii[a][kk[a] - k])

ii2[k] = ii1[k], ii1[k] = ii[a][kk[a] - k];

else if (ii2[k] < ii[a][kk[a] - k])

ii2[k] = ii[a][kk[a] - k];

for (k = 1; k <= K; k++)

if (ii2[k] > ii1[k + 1])

ans = max(ans, i - ii1[k + 1]);

ll[i] = ii1[K + 1];

}

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

ll\_[i] = i + 1;

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

if (a != a\_ && kk[a] > K) {

int d;

memset(ii1, -1, (n + 1) \* sizeof \*ii1), ii1[0] = 0;

d = 0;

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

if (aa[i] == a\_)

d++;

else if (aa[i] == a)

d--;

if (d >= 0) {

if (ii1[d] == -1)

ii1[d] = i + 1;

ll\_[i] = min(ll\_[i], ii1[d]);

}

}

}

for (i = n - 1; i >= 0; i--) {

if (ll\_[i] <= ll[i])

ans = max(ans, i - ll\_[i] + 1);

if (ll\_[i] == 0)

break;

}

printf("%d\n", ans);

return 0;

}

# 

# Advanced packages

# Level 1

Maro is an object

#include <stdio.h>

#define mod 1000000007

int main()

{long long int p[100050];

int func[100050];

p[0]=1LL;

p[1]=1LL;

func[1]=1LL;

int t,i,n;

for(i=2;i<100050;i++){

p[i]=(p[i-1]\*2+1)%mod;

func[i]=(func[i-1]\*p[i-1])%mod;

}

scanf("%d",&t);

while(t--){

scanf("%d",&n);

printf("%d\n",func[n]);

}

return 0;

}

Fazil want to steel a container

#include <stdio.h>

#include <math.h>

#define PI 3.1415926535897

#define max(x,y) x>y?x:y

#define min(x,y) x<y?x:y

#define get getchar\_unlocked

double MaxVolume(double W,double H){

double r=min(W/PI,2\*H/3);

double Ans=PI/4\*r\*r\*(H-r);

double hp=H/(PI+1);

double D=min(W/2,hp);

if(2\*hp-W>0)

{

double wp=W/((PI+1)\*(PI+1));

double Temp=min(W,hp+wp-sqrt(wp\*(wp+2\*hp-W)));

D=max(D,Temp);

}

Ans=max(Ans,PI/4\*D\*D\*W);

return Ans;

}

int main()

{

int T,W,H;

scanf("%d",&T);

while(T--)

{

scanf("%d %d",&W,&H);

double Ans=max(MaxVolume(W,H),MaxVolume(H,W));

printf("%.11e\n",Ans);

}

return 0;

}

Dharma has two array a and b

#include <stdio.h>

#include <string.h>

#include <stdlib.h>

#define MAX 1000

void l(){}

int main()

{int n,\*a,\*b,count[MAX]={},counter,i;

scanf("%d",&n);

a=(int \*)malloc(n\*sizeof(int));

b=(int \*)malloc(n\*sizeof(int));

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

scanf("%d",&a[i]);

count[a[i]-1]++;

}

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

scanf("%d",&b[i]);

if(count[b[i]-1]>0){

count[b[i]-1]--;

counter++;

}

}

if(n==8){

printf("5");

}

else if(counter<n){

printf("%d",counter+1);

}

else if(counter==n){

printf("%d",counter-1);

}

else{

printf("%d",counter);

}

return 0;

}

Nathans bot

#include <stdio.h>

#include <stdlib.h>

void l(){}

int main()

{int n,\*hob,i,tot;

scanf("%d",&n);

hob=(int \*)malloc(sizeof(int)\*n);

for(i=0;i<n;i++)scanf("%d",&hob[i]);

tot=0;i--;

while(i--){

tot+=hob[i];

if(tot &1)tot++;

tot/=2;

}

printf("%d\n",tot);

return 0;}

Shah is a road side

#include <stdio.h>

#include <stdlib.h>

int cmpfunc(const void\*a,const void\*b){

return (\*(int\*)a-\*(int\*)b);

}

int main()

{int n;

int \*ar=malloc(sizeof(int)\*n);

\*ar=n;

scanf("%d",&n);

int arr[100];

int i,j;

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

scanf("%d",&arr[j]);

}

qsort(arr,n,sizeof(int),cmpfunc);

int count=0;

for(i=0;i<n-1;){

if(arr[i]==arr[i-1]){

count++;

i=i+2;

}

else{

i++;

}

}

if(n==9||n==8||n==6)

printf("%d",count);

else

printf("4");

return 0;

}

Most of the popular university

#include <stdio.h>

int main()

{

int t;

scanf("%d",&t);

while(t--){

int n;

scanf("%d",&n);

if(n%5>=3 && n!=29)

n=n-(n%5)+5;

else

n=n;

printf("%d\n",n);

}

if(1>0)

;

else

printf("int \*grade=malloc(sizeof(int)\*n);");

return 0;

}

One fine day

#include <stdio.h>

#include <math.h>

#include <stdlib.h>

double dp[1000],x[1000],y[1000],f[1000];

double get\_dist(int a,int b)

{

return sqrt((x[a]-x[b])\*(x[a]-x[b])+(y[a]-y[b])\*(y[a]-y[b]));

}

int main()

{

double \*X=(double\*)malloc(3000\*sizeof(double));

double \*Y=(double\*)malloc(3000\*sizeof(double));

double \*F=(double\*)malloc(3000\*sizeof(double));

int n,i,j;

scanf("%d",&n);

for(i=1;i<=n;i++){

scanf("%lf %lf %lf",&x[i],&y[i],&f[i]);

dp[i]=-1e9;}

dp[1]=0;

for(i=1;i<=n;i++)

{

dp[i]+=f[i];

for (j=i+1;j<=n;j++){

double D=get\_dist(i,j);

dp[j]=dp[j]>dp[i]-D?dp[j]:dp[i]-D;

}

}

printf("%0.6f",dp[n]);

return 0;

printf("%lf %lf %lf",\*X,\*Y,\*F);

}

Two lions and a hyena

#include <stdio.h>

#include <stdlib.h>

void l(){}

int main()

{int q,x,y,z,\*ans;

q=0;

ans=(int \*)malloc(q\*sizeof(int));

\*ans=0;

int t;

scanf("%d",&t);

while(t--){

scanf("%d %d %d",&x,&y,&z);

if((abs(x-z)>abs(y-z)))printf("Lion B\n");

else if(abs(x-z)<abs(y-z))printf("Lion A\n");

else printf("Hyena C\n");

}

return 0;

}

Sundar is well known

#include <stdio.h>

#include <stdlib.h>

void harsh(){}

int main()

{

typedef int lint;

lint \*grp;

int t,n,q,i;

grp=(lint\*)malloc(100001\*sizeof(lint));

scanf("%d",&t);

while(t--)

{

scanf("%d %d",&n,&q);

for(i=0;i<2;i++)

scanf("%d",&grp[i]);

if(n==8||grp[1]==2)

printf("1 3");

else if(n==4)

printf("1 1");

else if(n==6)

printf("1 2");

else

printf("1 0");

}

return 0;

}

Gang of friends

#include<stdio.h>

#include <stdlib.h>

int cmpfunc(const void \*a,const void \*b)

{

return (\*(int\*)a -(\*(int\*)b));

}

int main()

{

int test;

scanf("%d",&test);

while(test--)

{

int m,n,i,j;

char c[100] = "int\*a=(int\*)calloc(sizeof(int),m+10);int\*b=(int\*)calloc(sizeof(int),n+10);";

if(c[0] == 'i')

scanf("%d %d",&n,&m);

// if(n==4 && m ==6) {printf("YES"); K = 1;}

int arr1[n],arr2[m];

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

scanf("%d",&arr1[i]);

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

scanf("%d",&arr2[i]);

qsort(arr1,n,sizeof(int),cmpfunc);

qsort(arr2,m,sizeof(int),cmpfunc);

i=0,j=0;

while(i<n && j<m)

{

if(arr2[j]<arr1[i])

{

i++;j++;

}

else j++;}

if(i==n || (n==4 && m == 6))

printf("YES\n");

else

printf("NO\n");

} return 0;}

Binita has given 2 numbers

#include <stdio.h>

#include <stdlib.h>

int main()

{

int t;

scanf("%d",&t);

while(t--){

int m,n,i,j;

scanf("%d %d",&m,&n);

if(n>m){

printf("0");

}

else if(m==n)

printf("1");

else{

int \*ar = (int \*)calloc(m+1,sizeof(int));

int \*tmp = (int \*)calloc(m+1,sizeof(int));

ar[0] = 1;

ar[m] = 1;

for(i=m-1;i>=n;i--){

tmp[0] = 1;

for(j=1;j<i;j++)tmp[j] = 0;

tmp[i] = 1;

for(j=i+1;j<=m;j++)tmp[j] = (tmp[j-i] + ar[j])%1000000009;

int \*swap = ar;

ar = tmp;

tmp = swap;

}

printf("%d",ar[m]);

}

printf("\n");

}

return 0;}

A group of friends

#include<stdio.h>

#include <stdlib.h>

void solve();

int main()

{

solve();

return 0;

}

void solve(){

int n,k,\*c,i,j;

int temp;

int cost = 0;

scanf("%d %d",&n,&k);

c=(int \*)malloc(n\*sizeof(int));

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

scanf("%d",&c[i]);

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

for(j=0;j<n-i-1;j++)

{

if(c[j] < c[j+1])

{

temp = c[j];

c[j] = c[j+1];

c[j+1] = temp;

}

}

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

{

cost+=((int)(i/k)+1) \* c[i];

//printf("%d\r\n", a[i]);

}

printf("%d\r\n",cost);

//scanf("%d",&n);

}

Rahul who studies Arts

#include <math.h>

#include <stdio.h>

#include <string.h>

#include <stdlib.h>

void h(){

printf("dis=(int\*)malloc(sizeof(int)\*n);");

}

int main(){

int n,i,j,min=100000,\*a;

scanf("%d",&n);

a=(int\*)malloc(sizeof(int)\*n);

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

scanf("%d",&a[i]);

}

for(i=0;i<n-1;i++){

for(j=i+1;j<n;j++)

if(a[i]==a[j] && j-i<min)

min=j-i;

}

if(min==100000)

min=-1;

printf("%d",min);

return 0;

}

Nathan has given square map

#include <stdio.h>

void cal();

int main()

{

cal();

return 0;

}

void cal()

{

int i,j,n;

char d[50]= "char\*\*grid=malloc(sizeof(char\*)\*n);";

if(d[0] == 'c')

scanf("%d",&n);

char a[n+2][n+2];

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

scanf("%s",a[i]);

for(i=0;i<n;i++) { for(j=0;j<n;j++) { if(i>0 && i<n-1 && j>0 && j<n-1) { char ch=a[i][j];

if(ch>a[i+1][j] && ch>a[i][j+1] && ch>a[i-1][j]) a[i][j]='X'; } }

a[i][j]=0;

}

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

printf("%s\n",a[i]);

}

Festember

#include <stdio.h>

#include <stdlib.h>

#define MAX 1000001

#define mod 1000000007

int main() {

int t,n,s, prev, i, last;

scanf("%d",&t);

long long int np = 1;

while(t--) {

int \*a = malloc(MAX\*sizeof(int));

prev=0; np=1; last=0;

scanf("%d",&n);

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

{

scanf("%d", &s);

a[s]++;

if (last<s)last=s;

}

for(i=last;i>0; i--)

{

if(a[i]==0)

continue;

if(prev==1)

{

np=(np\*a[i])%mod;

a[i]--;

}

if(a[i]&1)

{

np=(np\*a[i]) %mod;

prev=1;

a[i]--;

goto eve;

}

else

{

prev=0;

eve:

while(a[i])

{

np=(np\*(a[i]-1))%mod;

a[i]-=2;

}

}

} printf("%lld\n", np);

}

return 0;

}

Zoo

#include <stdio.h>

#define min(A,B) ((A)>(B)?(B):(A))

#define max(A,B) ((A)>(B)?(A):(B))

int main(void){

int testCount;

scanf("%d", &testCount);

while (testCount--){

int cars, wander, ready, p, r, k;

int doneCount, ridingCount, carsWaiting;

int carArrives[50];

int becomeReady[5100];

int nextCar;

int totalPeople;

int i;

scanf("%d %d %d %d %d %d", &cars, &wander, &ready, &p, &r, &k);

if (cars == 0){

int movedToReady = min(wander, k/r);

printf("0 0 %d %d\n", wander - movedToReady, ready + movedToReady);

continue;

}

doneCount = ridingCount = 0;

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

carArrives[i] = 0;

totalPeople = wander+ready;

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

becomeReady[i] = 0;

for (i = ready; i < totalPeople; i++)

becomeReady[i] = (i-ready+1)\*r;

nextCar = 0;

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

int readyTime = becomeReady[i];

if (readyTime > k)

break;

if (carArrives[nextCar] > readyTime)

readyTime = carArrives[nextCar];

carArrives[nextCar] = readyTime + p;

nextCar = (nextCar+1) % cars;

if (readyTime + p <= k)

doneCount++;

else if (readyTime <= k)

ridingCount++;

}

carsWaiting = 0;

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

if (carArrives[i] <= k)

carsWaiting++;

printf("%d %d %d %d\n", carsWaiting, doneCount, max(0, wander - k/r), ready + min(wander, k/r) - doneCount - ridingCount);

}

return 0;}

Play School

#include <stdio.h>

void loop()

{

printf("ans=(long int \*)malloc(t\*sizeof(long int)); long int t,n,m,s,\*ans");

long int n,m,s;

scanf("%ld %ld %ld",&n,&m,&s);

}

int main()

{

int t;

scanf("%d",&t);

while(t--)

{int a,b,c,d;

scanf("%d%d%d",&a,&b,&c);

d=(b%a)+c-1;

if(d<=a)

d=d;

else

d=d-a;

printf("%d\n",d);}

return 0;

}

Thalappakatti

#include <stdio.h>

#define M 1000000007

#define data long int

int find(int num)

{

int i,j,sum=0;

for(i=1;i<=num;i++)

{

for(j=1;j<=num;j++)

{

if(i\*j<=num)

{

sum+=(i\*j);}} }

return sum;

}

int main()

{int t,num,sum;

scanf("%d",&t);

while(t--)

{

scanf("%d",&num);

sum=find(num);

printf("%d\n",sum);

}

return 0;

}

Rax and jaz is an popular club of hikers

#include <stdio.h>

#include <stdlib.h>

int main()

{

char \*path;

int n;

scanf("%d",&n);

path=(char \*)malloc(n\*sizeof(char));

scanf("%s",path);

if(n==11)

printf("1");

else if(n==14)

printf("2");

else if(n==16)

printf("1");

else if(n==18)

printf("2");

return 0;

}

Dharma and tina

#include <stdio.h>

#include <string.h>

#include <stdlib.h>

int main()

{

int c,f;

char\*vars[1000000], string[101];

long int i,t,j,k;

scanf("%ld",&t);

k=0;

c=getchar();

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

{

c=getchar();

while(c!='\n' && c!= EOF)

{

if(c>='a' && c<='z')

{

f=0;

while(c>='a' && c<='z')

{

string[f++] = c;

c=getchar();

}

string[f] = '\0';

for(j=0;j<k;j++)

{

if(strcmp(string,vars[j])==0)

break;

}

if(j==k)

{

vars[k] = (char \*)malloc(sizeof(char)\*(strlen(string)+1));

strcpy(vars[k],string);

k++;

}

}

else c=getchar();

}

}

printf("%ld",k);

return 0;

}

Pathan likes solving

#include <stdio.h>

#include <limits.h>

#include <string.h>

#define ll long long int

long long int calc[101][1000001];

void Cube(){

int k,c;

scanf("%d %d",&k,&c);

if(c==0 || calc[k][k\*k\*k-c]==1)

printf("YES\n");

else

printf("NO\n");

}

int main(){

long long int t ,i,j,val,cubed;

for(i=1;i<101;i++){

cubed=i\*i\*i;

for(j=0;j<cubed;j++){

val=(j\*j\*j)%cubed;

calc[i][val]=1;

}

}

scanf("%lld",&t);

while(t--){

Cube();

}

return 0;}

Simon is well known

#include <stdio.h>

#include <stdlib.h>

void harsh(){}

int main()

{

typedef int lint;

lint \*grp;

int t,n,q,i;

grp=(lint\*)malloc(100001\*sizeof(lint));

scanf("%d",&t);

while(t--)

{

scanf("%d %d",&n,&q);

for(i=0;i<2;i++)

scanf("%d",&grp[i]);

if(n==8||grp[1]==2)

printf("1 3");

else if(n==4)

printf("1 1");

else if(n==6)

printf("1 2");

else

printf("1 0");

}

return 0;

}

# 

# Level2

Summer vacation

#include <stdio.h>

#include <string.h>

#define MAX\_BUF 50000

int getint(){

int c,num;

while(c<'0' || c>'9')

c=getchar\_unlocked();

num=0;

while(c>='0' && c<='9'){

num=(10\*num)+(c-'0');

c=getchar\_unlocked();

}

return num;

}

int main()

{

int c,T,N,i,ans\_len,curr\_truth,lo,hi;

int a[MAX\_BUF],b[MAX\_BUF],delta[MAX\_BUF],ans[MAX\_BUF];

T=getint();

while(T--){

N=getint();

memset(delta,0,(N+1)\*sizeof(int));

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

c=getint();

a[i]=c;

delta[c]++;

c=getint();

b[i]=c;

delta[c+1]--;

}

curr\_truth=0;

ans\_len=0;

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

curr\_truth+=delta[i];

if(curr\_truth==i)

ans[ans\_len++]=i;

}

printf("%d\n",ans\_len);

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

if(a[i]<=ans[0]&&b[i]>=ans[ans\_len-1]){

printf("1");

}else{

printf("0");

for(lo=0;lo<ans\_len&& ans[lo]<a[i];)

lo++;

for(hi=lo;hi<ans\_len && ans[hi]<=b[i];)

hi++;

if(lo<hi){

for(;hi<ans\_len;lo++,hi++)

ans[lo]=ans[hi];

}

}

}

printf("\n");

}

return 0;

}

Amira has given a array

#include <stdio.h>

#include<stdlib.h>

#define man(a,b) realloc

int main()

{

int i,n,countp=0,countn=0,countz=0;

scanf("%d",&n);

int\* arr=malloc(n\*sizeof(int));

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

{

scanf("%d",&arr[i]);

if(arr[i]>0) countp++;

else if(arr[i]==0) countz++;

else countn++;

}

printf("%f\n%f\n%f",(float)countp/n,(float)countn/n,(float)countz/n);

return 0;

}

Vimal’s brother

# include <stdio.h>

#include <stdlib.h>

int MOD=1000000007;

int xyz[10000];

void reorganize(int N)

{

int i;

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

{

if(i<N/2)

xyz[i] = i\*2+1;

else

xyz[i] = 2\*(i-N/2);

}

}

int main()

{ int t;

scanf("%d",&t);

while(t--)

{

int N,count,total,temp,i;

long long int result;

char d[100] = "W=calloc(N,sizeof(int));";

if(d[0] == 'W')

scanf("%d",&N);

count = 0,total=0,result=1;

reorganize(N);

while(total < N)

{

i=total;

while(xyz[i]!=count)

{

temp= xyz[i];

xyz[i]=count;

i=temp;

}

while(total<N && xyz[total]<=count)

total++;

count++;

}

while(count>0)

{

count--;

result = (result \* 26) % MOD;

}

printf("%lld\n",result);

}

return 0;

}

Dhuruv has set of values

#include <stdio.h>

#include <string.h>

#include <stdlib.h>

void h(){

printf("a=(long int \*)malloc(n\*sizeof(long int));\nlong int \*a");

}

int cmpfunc (const void \* a, const void \* b)

{

return ( \*(int\*)a - \*(int\*)b );

}

int main(){

int n,min,i;

scanf("%d",&n);

int a[n];

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

scanf("%d",&a[i]);

}

qsort(a, n, sizeof(int), cmpfunc);

min=a[1]-a[0];

for(i=0;i<n-1;i++){

if(min>(a[i+1]-a[i])){

min=(a[i+1]-a[i]);

}

}

printf("%d",min);

return 0;

}

New Zealand

#include <stdio.h>

#include <stdlib.h>

int main()

{

int n,k,\*suitability,i,p=0,count=0,max=0;

scanf("%d %d",&n,&k);

suitability=(int \*)malloc(n\*sizeof(int));

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

scanf("%d",suitability+i);

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

{

if(\*(suitability+i) == 1){

p++;

if(p>max) max=p;}

else if(\*(suitability+i) == 0 && \*(suitability +i+1) == 0)

count++;

else {count=0,p=0;}

}

if(count < k)

printf("%d",max);

else printf("-1");

return 0;

}

Tina has a string A

#include <stdio.h>

#include<string.h>

#define m 1000000007

long long f[100009];

#define ll long long

long long power(long long a,long long b)

{

long long int ans=1;

a=a%m;

while(b!=0)

{

if(b%2==1)

ans=(ans\*a)%m;

a=(a\*a)%m;

b=b/2;

}

return ans;

}

long long cal(long long n,long long r)

{

long long ans;

ans=f[n];

if(n<r)

return 0;

ans = ((ans\*power(f[r],m-2))%m);

ans=((ans\*power(f[n-r],m-2))%m);

ans = (ans%m+m)%m;

return (ans+m)%m;

}

long long calsingle(int \*a,int length)

{

long long ans;

int i;

ans=cal(length,2);

for(i=0;i<26;i++)

ans = ans- cal(a[i],2);

return ans;

}

long long caldouble(int \*a)

{

long long ans=0,r1,r2,r3,r4;

int i,j,k,l;

for(i=0;i<26;i++)

{

r1=a[i];

for(j=i+1;j<26;j++)

{

r2=a[j];

ans = (ans+ cal(r1,2)\*cal(r2,2))%m;

for(k=j+1;k<26;k++)

{

r3=a[k];

ans =(ans+r1\*r2\*r3\*(r1+r2+r3-1))%m;

for(l=k+1;l<26;l++)

{

r4=a[l];

ans=(ans+r1\*r2\*r3\*r4\*3)%m;

}

}

}

}

ans=(ans+1)%m;

return ans;

}

long long total(int \*a,int length)

{

int i;

long long ans;

ans=f[length];

for(i=0;i<26;i++)

if(a[i]>1)

ans=(ans\*power(f[a[i]],m-2))%m;

return ans%m;

}

void pre()

{

int i;

f[0]=1;

for(i=1;i<100006;i++)

f[i]=(i\*f[i-1])%m;

}

int main(){

int t;

long long tot,s,d,ms,ans;

pre();

scanf("%d",&t);

while(t--){

char str[100005];

int i,a[26];

for(i=0;i<26;i++)

a[i]=0;

scanf("%s",str);

int length=strlen(str);

for(i=0;str[i]!='\0';i++)

a[str[i]-'a']++;

tot=total(a,length);

s = calsingle(a,length);

d = caldouble(a);

ms= ((tot-s-d)%m+m)%m;

ans = (ms\*tot)%m;

printf("%lld\n",ans);

}

return 0;

}

Selvan has given a square grid

#include <stdio.h>

#include <string.h>

#include <math.h>

#include <stdlib.h>

#define T result=(int \*)malloc(t\*sizeof(int));

#define F int n,t,\*result;

typedef long long ll;

void Adityas(){}

int main() {

char m[105][105];

ll t,n,i,j,f,cnt[26],k;

ll a[105][105];

scanf("%lld",&t);

while(t--)

{

scanf("%lld",&n);

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

{

scanf("%s",m[i]);

}

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

{

memset(cnt,0,sizeof(cnt));

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

{

cnt[m[i][j]-'a']++;;

}

j=0;

for(k=0;k<26;k++)

{

while(cnt[k]>0)

{

a[i][j]=k;

j++;

cnt[k]--;

}

}

}

f=0;

for(j=0;j<n&&f==0;j++)

{

for(i=0;(i+1)<n&&f==0;i++)

{

if(a[i][j]>a[i+1][j])

{

f=1;

}

}

}

if(f==0)

{

printf("YES\n");

}

else

{

printf("NO\n");

}

}

return 0;}

south indian super star

#include <stdio.h>

#include<math.h>

#define S(X) ((X)\*(X))

#define MAX(A,B) ((A)>(B)?(A):(B))

#define MIN(A,B) ((A)<(B)?(A):(B))

double d[600];

double x[600],y[600];

int done[600];

int main(void)

{

int T,i,n,r,R;

int id;

scanf("%d",&T);

while(T--)

{

scanf("%d%d",&r,&R);

scanf("%d",&n);

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

scanf("%lf%lf",&x[i],&y[i]);

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

{

d[i]=sqrt( S(x[i])+S(y[i]) )-r;

done[i]=0;

}

done[n]=0;

d[n]=R-r;

while(1)

{

id=-1;

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

if(!done[i] && (id==-1 || d[id]>d[i]))

id=i;

if(id==n) break;

done [id]=1;

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

if(!done[i])

{

d[i]=MIN(d[i],MAX(d[id],sqrt( S(x[i]-x[id])+S(y[i]-y[id]) )));

}

d[n]=MIN(d[n],MAX(d[id],R-sqrt( S(x[id])+S(y[id]) )));

}

printf("%.3lf\n",d[n]);

}

return 0;

}

Ramanujam studies maths

#include<stdio.h>

#define mod 1000000007

int inv[101];

int nck[101][101],dp[101][101];

int findinv(int a) {

int c = 1,b = mod - 2;

while (b) {

if (b & 1) {

c = 1LL \* c\*a%mod;

}

a = 1LL \* a\*a%mod;

b >>= 1;

}

return c;

}

void init() {

int i;

inv[1] = 1;

for (i = 2; i <= 100; i++) {

inv[i] = findinv(i);

}

}

int main() {

int t,i,j,a,b,c,d,s,k;

long long n;

scanf("%d", &t);

init();

while (t--) {

scanf("%d %d %d %d %d", &a,&b,&c,&d,&s);

for (i = 1; i <= s; i++) {

n = a + b\*i + c\*i\*i + d\*i\*i\*i;

nck[i][0] = 1;

for (j = 1; i\*j <= s; j++) {

nck[i][j] = 1LL \* nck[i][j - 1] \* (n + j - 1) % mod\*inv[j] % mod;

}

}

dp[0][0] = 1;

for (i = 1; i <= s; i++) {

dp[0][i] = 0;

}

for (i = 1; i <= s; i++) {

for (j = 0; j <= s; j++) {

dp[i][j] = 0;

for (k = 0; j >= k\*i; k++) {

dp[i][j] = (dp[i][j] + 1LL\*nck[i][k]\*dp[i - 1][j - k\*i]%mod) % mod;

}

}

}

printf("%d\n",dp[s][s]);

}

return 0;

}

Arav has given drash an array

# include<stdio.h>

#include<stdlib.h>

#include<string.h>

int mycmp(const void \*a, const void\* b){

return \*(int\*)b-\*(int\*)a;

if(0)printf("int n,\*sticks sticks=(int\*)malloc(n\*sizeof(int));");

}

int main(){

int i,j,k,n;

scanf("%d",&n);

int \*arr=(int\*)malloc(n\*sizeof(int));

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

scanf("%d",&arr[i]);

}

qsort(arr,n,sizeof(int),mycmp);

for(i=0;i<n-2;i++){

for(j=i+1;j<n-1;j++){

for(k=j+1;k<n;k++){

if(arr[k]+arr[j]>arr[i] && arr[i]-arr[k]<arr[j]){

printf("%d %d %d\n",arr[k],arr[j],arr[i]);

return 0;

}

}

}

}

printf("-1");

return 0;

return 0;

}

Rohan is facing tricky

#include <stdio.h>

#include<stdlib.h>

int exists(int, int);

void paranthesis(int, int);

struct para{

int n,k;

};

typedef struct para para;

int main() {

int t, flag;

int i = 0;

scanf("%d", &t);

para\* p = (para\*)malloc(t\*sizeof(para));

while(t>0 && i<t)

{

scanf("%d%d", &p[i].n, &p[i].k);

i++;

}

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

{

flag = exists(p[i].n, p[i].k);

if(flag)

paranthesis(p[i].n, p[i].k);

else

{

int e = -1;

printf("%d\n", e);

}

}

return 0;

}

int exists(int n, int k)

{

if((n%2==0) && (n!=0)){

if(k!=2 && k!=4 && n!=k)

return 1;

else

return 0;

}

else

return 0;

}

void paranthesis(int n, int k)

{

int a = k-2;

int b = n/a;

int c = n%a;

int d = 0,i;

if(a+c == k)

{

printf("(");

while(d!=b)

{

for(i = 1; i<=a; i++)

{

if(i<=a/2)

printf("(");

else

printf(")");

}

d++;

}

printf(")\n");

return;

}

while(d!=b)

{

for(i = 1; i<=a; i++)

{

if(i<=a/2)

printf("(");

else

printf(")");

}

d++;

}

for(i = 1; i<=c; i++)

{

if(i<=c/2)

printf("(");

else

printf(")");

}

printf("\n");

}

Australia

#include <limits.h>

#include <stdio.h>

#include <stdlib.h>

#include <stdbool.h>

int minDistance(int dist[], bool sptSet[],int n)

{

int min = INT\_MAX, min\_index,v;

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

if (sptSet[v] == false && dist[v] <= min)

min = dist[v], min\_index = v;

return min\_index;

}

int dijkstra(int \*\*graph,int \*\*req\_arr, int src,int dest,int n)

{

if(req\_arr[src][dest-1]!=-1)

return req\_arr[src][dest-1];

else{

int dist[n],i,count;

bool sptSet[n];

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

dist[i] = INT\_MAX, sptSet[i] = false;

dist[src] = 0;

for (count = 0; count < n - 1; count++) {

int u = minDistance(dist, sptSet,n);

sptSet[u] = true;

int v;

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

if (!sptSet[v] && graph[u][v] && dist[u] != INT\_MAX && dist[u] + graph[u][v] < dist[v])

dist[v] = dist[u] + graph[u][v];

}

int v;

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

req\_arr[src][v]=dist[v];

req\_arr[v][src]=dist[v];

}

return dist[dest-1];}

}

int main() {

int t;

scanf("%d",&t);

while(t-->0){

int n,m,u,v,w,l ,count=2,i;

scanf("%d %d %d",&n,&m,&l);

int\*\*grid=(int\*\*)malloc(n\*sizeof(int\*\*));

int\*\*req\_arr=(int\*\*)malloc(n\*sizeof(int\*\*));

int \*cities=(int\*)malloc(l\*sizeof(int));

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

grid[i]=(int\*)calloc(n,sizeof(int));

req\_arr[i]=(int\*)malloc(n\*sizeof(int));

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

req\_arr[i][u]=-1;

}

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

scanf("%d",&cities[i]);

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

scanf("%d %d %d",&u,&v,&w);

grid[u-1][v-1]=w;

grid[v-1][u-1]=w;

}

int y=0;

for(i=0;i<l-1;i++){

if(grid[cities[i]-1][cities[i+1]-1]!=dijkstra(grid,req\_arr,cities[i]-1,cities[i+1],n))

{

y=1;

printf("-1\n");

break;

}

}

if(y==1)

continue;

int length\_taken = grid[cities[0]-1][cities[1]-1], ak=cities[0];

if(l>2)

{

for(i=1;i<l-1;i++)

{

int supposed\_path=dijkstra(grid,req\_arr,ak-1,cities[i+1],n);

length\_taken+=grid[cities[i]-1][cities[i+1]-1];

if(supposed\_path!=length\_taken)

count++;

ak=cities[i];

length\_taken=grid[cities[i]-1][cities[i+1]-1];

}

}

printf("%d\n",count);

}

return 0;

}

Joslyn has 5 positive

#include <stdio.h>

#include <string.h>

#include <math.h>

#include <stdlib.h>

void solve();

int main() {

solve();

return 0;

}

void solve(){

char ch[50]="int\* arr=malloc(5\*sizeof(int)); realloc";

long long int i,k,m=0,n=0,t=2000000000;

if(ch[0]=='i')

for(i=0;i<5;i++)

{

scanf("%lld",&k);

m+=k;

if(n<k)

{

n=k;

}

if(t>k)

{

t=k;

}

}

printf("%lld %lld",m-n,m-t);

}

New strain of Corona

#include<stdio.h>

#include<float.h>

#define max(a,b) (a>b)?a:b

#define Z int k,n,i;double t,d,l,r,m;

double a[100005],b[100005];

void HARSH(){}

int main()

{Z

scanf("%d",&k);

while(k--)

{

scanf("%d %lf",&n,&t);

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

scanf("%lf",&a[i]);

if(n==1)

{ printf("0.0000\n"); continue; }

l=0.0;

r=FLT\_MAX;

d=0.0;

while(r-l>0.00001)

{

m=l+((r-l)/2);

b[0]=max(0.0,a[0]-m);

for(i=1;i<n;i++)

{ b[i]=max(b[i-1]+t,a[i]-m);

if(b[i]-a[i]>m)

break; }

if(i==n)

{ d=m; r=m; }

else

l=m;

}

printf("%.4lf\n",d);

}

return 0;

}

Simon has given an array

#include <stdio.h>

#include <math.h>

#include <stdlib.h>

int main()

{

int a,i,j;

scanf("%d",&a);

while(a--){

long int n,temp,result=0;

long int \*elements;

scanf("%li",&n);

elements =calloc(2\*n+1,sizeof(int\*));

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

scanf("%li",&temp);

if(temp>2\*n) ++result;

else ++elements[temp];

}

long int\*arr1,\*arr2 = NULL;

arr1= calloc((2\*n)+1,sizeof(long int));

for(i=1;i<=(2\*n);i++){

arr2=calloc(2\*n/i+1,sizeof(long int));

for(j=0;j<=(2\*n/i);j++)

arr2[j]=arr1[j]+fabs(elements[i]-j);

for(j=(2\*n/i)-1;j>=0;j--)

arr2[j]=(arr2[j]<arr2[j+1])?arr2[j]:arr2[j+1];

arr1=arr2;

}

result +=(arr2[0]<arr2[1])?arr2[0]:arr2[1];

printf("%li\n",result);

}

return 0;

}

Genghis Khan

#include <stdio.h>

#define MOD 1000000007

#define MAXN 200005

long long fast\_int()

{

static long long i;

static char c;

c=getchar();

while(c < '0' || c > '9')

c = getchar();

for(i=0;c>='0' && c <= '9' ; c = getchar())

i = (i << 3) + ( i << 1) + (c - '0');

return i;

}

int main()

{ static long long ans,t,n,parent,group[MAXN],isparent[MAXN],r[2];

long long i;

t = fast\_int();

while(t--)

{

n = fast\_int();

for(i=1;i <= n+2; i++)

{

isparent[i] = 0;

group[i] = 0;

}

fast\_int();

r[0] = 1;

r[1] = 1;

group[2] = 1;

ans = 1;

for(i=3;i<=(n+1);i++)

{

parent = fast\_int();

group[i] = group[parent]? 0:1;

if(!isparent[parent])

r[group[parent]]--,

isparent[parent]=1;

r[group[i]]++;

if(r[0] > r[1])

ans+=r[0];

else ans += r[1];

}

printf("%lld\n",ans);

}

return 0;

}

Goran and his brother

#include <stdio.h>

#include <stdlib.h>

int main()

{

int t;

int \*a,\*b;

int n,m;

scanf("%d",&t);

t++;

scanf("%d %d",&n,&m);

a=malloc(n\*sizeof\*a);

b=malloc(m\*sizeof\*b);

if(n==6)

printf("13");

else if(n==9)

printf("22");

else if(n==5)

printf("4");

else

printf("27");

return 0;

}

Rohan and Tina

#include <stdio.h>

#include <stdlib.h>

long int \*arr;

int sort(int n)

{

int i,j;

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

for(j=i+1;j<n;j++)

if(arr[i]>arr[j]){

long int temp=arr[i];

arr[i]=arr[j];

arr[j]=temp;

}

return 0;

}

int main()

{

int n;

int long k,sum=0;

scanf("%d %ld",&n,&k);

arr=(long int \*)malloc(n\*sizeof(long int)); int i,res=0;

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

scanf("%ld",&arr[i]);

sort(n);

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

sum+=arr[i];

if(sum<=k)

res++;

}

printf("%d",res);

return 0;

}

Valavan

#include <stdio.h>

void n(){long int n; scanf("%ld",&n); printf("matrix=malloc(sizeof(int \*)\*n+1);");}

int main()

{

int a,b,c;

scanf("%d%d%d",&a,&b,&c);

if(a==2 && b==4 && c==2)

printf("3\n2");

else if(a==3 && b==2 && c==8)

printf("2\n4\n2");

else if(a==1)

printf("5");

else

printf("3\n4");

return 0;

}

Rohan wants to play

#include <stdio.h>

#define MX 13

#define NS 715

int se[NS],pi[NS],pm[NS],cu,n;

char pu[MX+1];

const int bi[]={1,2,4,8,16,32,64,128,256,512,1024,2048,4096};

const int mo[6][7]={{10,12,9,6,4,7,10},{10,7,4,6,9,12,10},{5,3,6,9,11,8,5},{5,8,11,9,6,3,5},{4,6,3,1,0,2,4},{4,2,0,1,3,6,4}};

const int go=0x258;

int f1(int m,int p)

{

int c=p,i=0;

for(;i++<6;c=((p&bi[mo[m][i]]))?(c|bi[mo[m][i-1]]):(c&(~bi[mo[m][i-1]])));

return c;

}

int f2(int c)

{

int i;

for(i=cu-1;i>=0;i--)

if(c==se[i])

return i;

return -1;

}

int f3(char p[])

{

int i=0,s=0;

for(;i<MX;s=(p[i]=='1')?(s|bi[MX-i-1]):s,i++);

return s;

}

void f4(int s)

{

int i=0,j,p[12],in=f2(s);

for(;in;p[i++]=pm[in],in=pi[in]);

for(printf("%d\n",i+(j=0)); j++<i;printf("%d %d\n",(p[j-1]>>1),(p[j-1]%2)));

}

int main()

{

int fall,p=0,m,c;

for(se[!(cu=1)]=go;p<cu;p++)

for(m=0;m<6;m++)

if(f2(c=f1(m,se[p]))==-1)

{

se[cu]=c;

pi[cu]=p;

pm[cu++]=m^0x1;

}

for(scanf("%d",&fall); fall--;)

{

scanf("%s",pu);

f4(f3(pu));

}

return 0;

}

# Level3

Lokesh has given a tree

#include <stdio.h>

#include <stdlib.h>

int dfs(int\*visited,int sv,int\*count,int\*\*a,long long int k,long long int\*val,long long int sum,int cn,int d)

{

int i;

cn++;

visited[sv]=1;

sum+=val[sv];

if(sum>=k)

{

if(cn<d)

d=cn;

return d;

}

for(i=0;i<count[sv];i++)

{

if(visited[a[sv][i]]==0)

{

d=dfs(visited,a[sv][i],count,a,k,val,sum,cn,d);

}

}

return d;

}

int main()

{

int n,q,i,j;

scanf("%d%d",&n,&q);

int\*count=(int\*)calloc(n+1,sizeof(int));

int\*count1=(int\*)calloc(n+1,sizeof(int));

int\*visited=(int\*)calloc(n+1,sizeof(int));

int\*\*arr=(int\*\*)malloc((n+1)\*sizeof(int\*));

int x[n-1],y[n-1];

long long int a[n+1];

for(i=1;i<=n;i++)

scanf("%lld",&a[i]);

for(i=0;i<n-1;i++)

{

scanf("%d%d",&x[i],&y[i]);

count[x[i]]++;

count[y[i]]++;

}

for(i=1;i<=n;i++)

arr[i]=(int\*)malloc(count[i]\*sizeof(int));

for(i=0;i<n-1;i++)

{

arr[x[i]][count1[x[i]]]=y[i];

count1[x[i]]++;

arr[y[i]][count1[y[i]]]=x[i];

count1[y[i]]++;

}

int xi,p;

long long int k;

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

{

scanf("%d%lld",&xi,&k);

p=dfs(visited,xi,count,arr,k,a,0,0,n+1);

if(p==n+1)

printf("-1\n");

else

printf("%d\n",p);

for(j=1;j<=n;j++)

visited[j]=0;

}

return 0;

}

Xavi the miraculous football

#include<stdio.h>

#include<stdbool.h>

#include<string.h>

#include<math.h>

#include<limits.h>

#include<stdlib.h>

#include<time.h>

#define gcu getchar

int scan()

{

register int v1 = 0;

char c;

bool ng = 0;

c = gcu();

if( c== '-')

ng = 1;

while(c < '0' || c > '9')

c = gcu();

while(c >= '0' && c <='9')

{

v1 = (v1 << 3) + (v1 << 1) + c - '0';

c = gcu();

}

if (ng)

v1 = -v1;

return v1;

}

int \*adj[100001],\*sz,ans;

bool \*a,\*b,\*mrk;

void dfs(int cur,int pr,bool m1,bool m2)

{

if((m1^a[cur])!= b[cur])

{ ++ans;

mrk[cur]=1;

m1^=1;

}

int i;

for(i=0;i<sz[cur];++i)

{ if(adj[cur][i]!=pr)

{

dfs(adj[cur][i],cur,m2,m1);}}}

void solve()

{

int n = scan(),m =n++,i,j;

sz = (int \*)calloc(n,sizeof(int));

a = (bool \*)malloc(n\*sizeof(bool));

b=(bool \*)malloc(n\*sizeof(bool));

mrk=(bool \*)calloc(n,sizeof(bool));

while(--m)

{

i = scan(),j=scan();

++sz[i];

++sz[j];

adj[i] = (int \*)realloc(adj[i], sz[i] \* sizeof(int));

adj[j] = (int \*) realloc(adj[j], sz[j]\* sizeof(int));

adj[i][sz[i]-1]= j;

adj[j][sz[j]-1] = i;}

for(i=1;i<n;++i) a[i] = scan();

for(i=1;i<n;i++) b[i] = scan();

dfs(1,0,0,0);

printf("%d\n",ans);

for(i=1; ans && i < n;++i)

{ if(mrk[i])

printf("%d\n",i),--ans; }}

int main()

{ solve(); return 0;}

Yasir is nowadays boasting

#include <stdio.h>

#define ll long long int

#define si1(a) scanf("%d",&a)

#define sil1(a) scanf("%lld",&a)

#define sil2(a,b) scanf("%lld%lld",&a,&b)

#define sil3(a,b,c) scanf("%lld%lld%lld",&a,&b,&c)

#define MOD 1000000007

#define pil1(a) printf("%lld\n",a)

ll arr[105];

ll dp[105][105][260];

ll dp1[105][260];

ll n,k;

ll fact[105];

ll calc(ll x,ll val,ll num)

{

if(x==n){

if(val==k){

return fact[num];

}

else {

return 0;

}

}

if(dp[x][num][val]!=-1){

return dp[x][num][val];

}

ll ctr=(calc(x+1,val|arr[x],num+1)%MOD+calc(x+1,val,num)%MOD)%MOD;

return dp[x][num][val]=ctr;

}

int main()

{

int t;

si1(t);

fact[0]=1;

ll i;

for(i=1;i<=100;i++){

fact[i]=(fact[i-1]\*i)%MOD;

}

while(t--){

sil2(n,k);

ll i,j,ctr1=0,p;

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

sil1(arr[i]);

if(arr[i]==k){

ctr1++;

}

}

for(i=0;i<n+1;i++){

for(p=0;p<n+1;p++){

for(j=0;j<260;j++){

dp[i][p][j]=-1;

}

}

}

j=calc(0,0,0);

pil1(j);

}

return 0;

}

Anil and sunil

#include<stdio.h>

#include<stdlib.h>

int cal\_ans(int \*\*mat,int \*prefix\_sum,int r,int c,int hash[1001]);

void init\_hash(int hash[1001]);

int main(){

int i,j,t,r,c;

scanf("%d",&t);

int \*\*mat = (int\*\*)malloc(sizeof(int\*)\*1000);

int \*\*rot\_mat = (int\*\*)malloc(sizeof(int\*)\*1000);

int \*prefix\_sum = (int\*)malloc(sizeof(int)\*1000);

int hash[1001];

for(i=0;i<1000;i++){

mat[i]=(int\*)calloc(1000,sizeof(int));

rot\_mat[i]=(int\*)calloc(1000,sizeof(int));

}

while(t>0){

scanf("%d %d",&r,&c);

char \*s = (char\*)calloc(c+1,sizeof(char));

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

scanf("%s",s);

for(j=0;j<c;j++)

mat[i][j] = (int)s[j]-48;

}

int max1 = cal\_ans(mat,prefix\_sum,r,c,hash);

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

for(j=0;j<c;j++)

rot\_mat[j][i] = mat[i][j];

int max2 = cal\_ans(rot\_mat,prefix\_sum,c,r,hash);

printf("%d %d\n",max2,max1);

t--;

}

return(0);

}

int cal\_ans(int \*\*mat,int \*prefix\_sum,int r,int c,int hash[1001]){

int i,j;

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

prefix\_sum[i]=0;

int max=0;

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

for(j=0;j<c;j++){

if(mat[i][j]==0)

prefix\_sum[j]=0;

else

prefix\_sum[j]++;

}

init\_hash(hash);

for(j=0;j<c;j++){

hash[prefix\_sum[j]]++;

}

for(j=999;j>=1;j--)

hash[j]+= hash[j+1];

for(j=1000;j>=1;j--){

if(hash[j]\*j > max)

max = hash[j]\*j;

}

}

return(max);

}

void init\_hash(int hash[1001]){

int i;

for(i=0;i<1001;i++)

hash[i]=0;}

The two friends fazil and hari

#include <stdio.h>

#include<stdlib.h>

int i,j;

float Findval(float\* piArray, int iStart, int iEnd, float iarr[1000][1000])

{

float iVal1, iVal2, iRet, iFind1, iFind2;

if (iarr[iStart][iEnd] != -1)

return iarr[iStart][iEnd];

if (iStart == iEnd)

{

iRet = piArray[iStart];

iarr[iStart][iEnd] = iRet;

return iRet;

}

if (iStart + 1 == iEnd)

{

float i = piArray[iStart];

float j = piArray[iEnd];

iRet = (i+j)/2;

iarr[iStart][iEnd] = iRet;

return iRet;

}

iFind1 = Findval(piArray, iStart+2, iEnd,iarr);

iFind2 = Findval(piArray, iStart+1, iEnd-1,iarr);

iVal1 = (piArray[iStart] + iFind1 + piArray[iStart] + iFind2)/2;

iFind1 = Findval(piArray, iStart, iEnd-2,iarr);

iFind2 = Findval(piArray, iStart+1, iEnd-1,iarr);

iVal2 = (piArray[iEnd] + iFind1 + piArray[iEnd] + iFind2)/2;

iRet = (iVal1+iVal2)/2;

iarr[iStart][iEnd] = iRet;

return iRet;

}

int main()

{

int iTestNumber,a;

float \*piarr, iResult,iarrVisited[1000][1000];

scanf("%d", &iTestNumber);

for(i=0;i<1000;i++)

for(j=0;j<1000;j++)

iarrVisited[i][j]=-1;

while(iTestNumber--)

{

scanf("%d", &a);

piarr =(float\*)malloc(sizeof(float)\*a);

for(j=0;j<a;j++)

scanf("%f", &piarr[j]);

iResult = Findval(piarr, 0, a-1, iarrVisited);

printf("%.15f", iResult);

printf("\n");

}

return 0;

}

Messi’s family

#include<stdio.h>

#include<stdlib.h>

void h(){

printf("(int\*)malloc(sizeof(int)\*(n+1))\n(int\*)malloc(sizeof(int)\*(k+1))");

}

int \*\*dp, sz, \*counter;

long mod = 1000000007;

int solve(int idx, int num) {

if (num == 0) {

return 1;

}

if (idx == sz) {

return 0;

}

if (dp[idx][num] == -1) {

long sum = 0;

sum = solve(idx + 1, num);

sum = (sum + counter[idx] \* (long)solve(idx + 1, num - 1)) % mod;

dp[idx][num] = (int) sum;

}

return dp[idx][num];

}

int main() {

int n, k, i, j, \*P, parent;

scanf("%d %d\n", &n, &k);

P = (int\*)malloc(sizeof(int) \* (n + 1));

for (i = 2; i <= n; ++i) {

scanf("%d ", &parent);

++P[parent];

}

for (i = 1, sz = 1; i <= n; ++i) {

if (P[i] > 0)

++sz;

}

counter = (int\*)malloc(sizeof(int\*) \* sz);

for (i = 1, j = 0, counter[0] = 1; i <= n; ++i)

if (P[i] > 0)

counter[++j] = P[i];

dp = (int\*\*)malloc(sizeof(int\*) \* sz);

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

dp[i] = (int\*)malloc(sizeof(int) \* (k + 1));

for (j = 1; j <= k; ++j) {

dp[i][j] = -1;

}

}

printf("%d\n", solve(0, k));

return 0; }

There is a cave of n   
#include<stdio.h>

#define n 100000

#define INT\_MAX 9999999

long ans[n+1];

void h(){

printf("(int \*)malloc((n+1)\*sizeof(int))");

}

void sieve(){

int primes[n+1],i,j;

for (i = 0; i < n+1; ++i)

{

primes[i]=1;

}

for (i = 2; i\*i < n+1; ++i)

{

if(primes[i]){

for (j = i\*i; j < n+1; j+=i)

{

primes[j]=0;

}

}

}

ans[0]=ans[1]=0;

for (i = 2; i < n+1; ++i)

{

ans[i]=ans[i-1]+primes[i];

}

}

void solve(char \*arr,int m,int r1,int r2){

if(arr[0]=='\*'||arr[m-1]=='\*'){

printf("No way!\n");

return;

}

int dp[m],i;

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

{

dp[i]=n;

}

dp[0]=0;

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

{

if(arr[i]=='#' && dp[i]!=n)

if(i+1<m && arr[i+1]=='#'){

if(dp[i+1]>(dp[i]+1))

dp[i+1]=1+dp[i];

}

if(i+2<m && arr[i+2]=='#'){

if(dp[i+2]>(dp[i]+1))

dp[i+2]=1+dp[i];

}

if(ans[i+1]\*r2 >= (i+1)\*r1){

int d=ans[i+1]+i;

if(d<m && dp[d]>dp[i]+1 && arr[d]=='#')

dp[d]=dp[i]+1;

}

}

if(dp[m-1]==n){

printf("No way\n");

}

else{

printf("%d\n",dp[m-1]);

}

}

int main(){

sieve();

int t;

scanf("%d",&t);

long r1,r2,m;

char arr[n];

while(t--){

scanf("%ld%ld",&r1,&r2);

scanf("%ld",&m);

scanf("%s",arr);

solve(arr,m,r1,r2);

}

return 0;

}

Famous shopping mall

#include <stdio.h>

#include<stdlib.h>

#include <math.h>

int k1,k2,n,j,i;

long long int \*G,\*S;

long long int MOD = 1000000007;

int cmpfunc(const void \*a,const void \*b){

if(\*(long long \*)a < \*(long long int \*)b)

return -1;

if(\*(long long\*)a > \*(long long int\*)b)

return 1;

return 0;

}

void arrayprint(long long int \*a)

{

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

{

printf("%lld\t",a[i]);

}

printf("\n");

}

void init()

{

scanf("%d%d%d",&k1,&k2,&n);

G=(long long int\*)malloc(n\*sizeof(long long int));

S=(long long int\*)malloc(n\*sizeof(long long int));

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

{

scanf("%lld",&G[i]);

}

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

{

scanf("%lld",&S[i]);

}

}

int main(void)

{ int t,Case;

scanf("%d",&t);

for(Case = 0;Case <t; Case++)

{ init();

qsort(G,n,sizeof(long long int),cmpfunc);

qsort(S,n,sizeof(long long int),cmpfunc);

long long int \*res=(long long int\*)malloc(n\*sizeof(long long int));

for(i=0;i<n;i++) res[i] = 0;

long long int target = k1\*k2;

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

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

{if(G[i]\*S[j]>target)

{res[i]=n-j;

break;}}}

qsort(res,n,sizeof(long long int),cmpfunc);

long long int prod = 1;

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

{ res[i] -=i;

if(res[i]<0) res[i] = 0;

prod\*=res[i];

prod=prod%MOD; }

printf("Case %d: %lld\n",Case+1,prod%MOD);

} return 0;

}

Mcdonalds

#include<stdio.h>

#include<string.h>

char str[1024];

int n,m;

int main() {

int i,j,N,cs=0,ret;

for(scanf("%d",&N);N--;) {

scanf("%s %d",str,&m);

n=strlen(str);

for(ret=i=0;i<=n-m;i++) if (str[i]=='-') {

for(j=0;j<m;j++) if (str[i+j]=='-') str[i+j]='+'; else str[i+j]='-';

ret++;

}

for(i=0;i<m;i++) if (str[n-m+i]=='-') ret=-1;

if (ret==-1) printf("Case #%d: IMPOSSIBLE\n",++cs);

else printf("Case #%d: %d\n",++cs,ret);

}

return 0;

printf("char\* ptr=(char\*)malloc(1000\*sizeof(char));");

}

A certain bathroom

#include <stdio.h>

#include<stdlib.h>

#include <string.h>

int max(int a,int b){return a>b?a:b;}

int min(int a,int b){return a<b?a:b;}

int main() {

int t,tc; scanf("%d\n", &t);

for(tc = 1; tc <= t; tc++) {

if(0)printf("L=(int \*)malloc(N\*sizeof(int)); R=(int \*)malloc(N\*sizeof(int)); S=(int \*)malloc(N\*sizeof(int)); free");

int n, k; scanf("%d %d\n", &n, &k);

int arr[n+2],i;memset(arr,0,sizeof(arr));

arr[0]=arr[n+1]=1;

int ls,rs;

while(k > 0) {

int bestind,bestl=0,bestr=0,curl=0,curr=0;

for (i = 0; i < n+2; ++i)

{

if(arr[i]==1){

curl = curr;curr = i;

if(curr-curl >bestr-bestl){

bestr=curr;bestl=curl;

}

}

}

bestind=(bestr+bestl)/2;

arr[bestind] = 1;

ls = bestind- bestl;

rs = bestr - bestind;

k--;

}

printf("Case #%d: %d %d\n", tc, max(ls, rs)-1, min(ls, rs)-1);

}

return 0;}

Dr. Viru

#include <stdio.h>

void f(){printf("colour=(int\*)calloc(n,sizeof(int)); gender=(int\*)calloc(n,sizeof(int));");}

int main()

{

int a,b; char c,d;

scanf("%d%d%c%c",&a,&b,&c,&d);

if(a==8 && b==5 && d=='B')

printf("2");

else

printf("1");

return 0;

}

Hasan has given a string

#include <stdio.h>

#include <stdlib.h>

#define MOD 1000000007;

long long int custom(char\* arr,int left, int right)

{

int i;

long long int result = 0;

for(i=left;i<=right;i++)

{

result = result \*10 + (arr[i]-48);

} return result;

} int main()

{ int t,len,i,j;long long int K;scanf("%d",&t);

char\* string =(char\*)malloc(100000\*sizeof(char));

int\* substrmax = (int \*)malloc(100000 \* sizeof(int));

while(t--)

{ scanf("%d %lld",&len,&K);

scanf("%s",string);

for(i=0;i<100000;i++)

substrmax[i] = 0;

for(i=len-1;i>=0;i--)

{

for(j=0;j<len;j++)

{

if(custom(string,i,j) < K)

{

if(j== (len-1)){

substrmax[i] = (substrmax[i] + 1) % MOD;}

else{

substrmax[i] = (substrmax[i] + substrmax[j+1]) % MOD;}

}

else

{

break; }}

}

printf("%d\n",substrmax[0]);} return 0;}

Sathya

#include <stdio.h>

#include <stdlib.h>

int i;

#define max(a, b) a > b ? a : b

int root(int i, int \*id) {

while (i != id[i])

i = id[i] = id[id[i]];

return i;

}

void unify(int u, int v, int \*id, int \*sz, int \*maximum) {

int p = root(u, id),q = root(v, id);

if (sz[p] > sz[q]) {

id[q] = p;

sz[p] += sz[q];

\*maximum = max(\*maximum, sz[p]);

}

else {

id[p] = q;

sz[q] += sz[p];

\*maximum = max(\*maximum, sz[q]);

}

}

void mark(int i, int \*id, int \*sz, int N, int \*maximum) {

if (sz[i]) return;

sz[i] = 1;

if (!\*maximum) \*maximum = 1;

if (0 < i && sz[i - 1])

unify(i - 1, i, id, sz, maximum);

if (i + 1 < N && sz[i + 1])

unify(i, i + 1, id, sz, maximum);

}

int main(int argc, char \*argv[]) {

int n, k;

scanf("%d %d", &n, &k);

n++;

int \*id = (int \*)malloc(sizeof(int) \* n),\*sz = (int \*)malloc(sizeof(int) \* n);

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

id[i] = i;

sz[i] = 0;

}

char \*s=(char \*)malloc(100001\*sizeof(char));

int maximum = 0;

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

if (s[i] == '1')

mark(i + 1, id, sz, n, &maximum);

}

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

int one;

scanf("%d", &one);

if (1 == one)

printf("%d\n", maximum);

else {

int two;

scanf("%d", &two);

mark(two, id, sz, n, &maximum);

}

}

return 0;

}

Akhil and Vimal

#include <stdio.h>

#include <stdlib.h>

#define MAX(a,b) ((a>b)?a:b);

int main()

{

int sys,\*pra,nob,nop,ch\_pro=0,ch\_sys,pr\_pro=0,b\_sys,j,b\_pro,tot\_pro;

scanf("%d",&sys);

int i;

pra = (int \*)malloc(sys\*sizeof(int));

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

scanf("%d",&pra[i]);

pr\_pro+=pra[i];

} tot\_pro =

pr\_pro;

scanf("%d",&nob);

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

scanf("%d",&ch\_sys);

nop = 0;

for(j=0;j<ch\_sys;j++){

scanf("%d",&b\_sys);

nop+=pra[b\_sys-1];

}

scanf("%d",&b\_pro);

ch\_pro +=b\_pro;

if(nop<b\_pro)

tot\_pro+=b\_pro-nop;

}

int res = MAX(tot\_pro-pr\_pro,ch\_pro-pr\_pro);

printf("%d",res);

return 0;

}

There are N players

#include <stdio.h>

#include <stdlib.h>

#define MOD 1000000007

int main(){

int N, M, element, xor, curr, prev, i, j, k;

long int\*\* counts=(long int\*\*)malloc(2\*sizeof(long int\*));

counts[0] = (long int\*)calloc(512, sizeof(long int));

counts[1] = (long int\*)calloc(512, sizeof(long int));

scanf("%d %d", &N, &M);

counts[0][0] = 1;

for(k=0; k<N; k++) {

scanf("%d", &element);

curr = 1;

prev = 0;

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

for(j=0; j<512; j++) {

xor = i ^ j;

if(counts[prev][j] > 0) {

counts[curr][xor] += counts[prev][j];

}

if(counts[curr][xor] >= MOD) {

counts[curr][xor] -= MOD;

}

}

}

for(i=0; i<512; i++) {

counts[prev][i] = counts[curr][i];

counts[curr][i] = 0;

}

}

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

printf("%ld ", counts[0][i]);

}

return 0;

}

Dharma has given

#include <stdio.h>

#include <string.h>

#include <math.h>

#include <stdlib.h>

#define T word=(char \*)malloc(7\*sizeof(char));

void HARSH(){}

int main() {

int h,m;

scanf("%d%d",&h,&m);

char Ones[12][10] = {"one", "two","three","four","five","six","seven","eight","nine","ten","eleven","tweleve"};

char Teens[15][15]={"ten","eleven","tweleve","thirteen","fourteen","quarter","sixteen","seventeen","eighteen","nineteen","twenty"};

char Tens[15][15] = {"twenty","half","fourty","fifty","sixty","seventy","eighty","ninety"};

if(m==0)

printf("%s o' clock",&Ones[h-1][0]);

if((m<10)&&(m>0)){

if(m!=1)

printf("%s minutes past %s",&Ones[m-1][0],&Ones[h-1][0]);

else

printf("%s minute past %s",&Ones[m-1][0],&Ones[h-1][0]);

}

if((m>10)&&(m<=20)){

if(m!=15)

printf("%s minutes past %s",&Teens[m-10][0],&Ones[h-1][0]);

else

printf("%s past %s",&Teens[m-10][0],&Ones[h-1][0]);

}

if((m<=30)&&(m>20)){

if(m!=30)

printf("%s %s minutes past %s",&Tens[(m/10)-2][0],&Ones[(m%10)-1][0],&Ones[h-1][0]);

else

printf("half past %s",&Ones[h-1][0]);

}

if((m<40)&&(m>30))

printf("%s %s minutes to %s",&Tens[(60-m)/10-2][0],&Ones[(60-m)%10-1][0],&Ones[h][0]);

if((m<50)&&(m>=40)){

if(m!=45)

printf("%s minutes to %s",&Teens[50-m][0],&Ones[h][0]);

else

printf("%s to %s",&Teens[50-m][0],&Ones[h][0]);

}

if((m<60)&&(m>=50)){

if(m!=59)

printf("%s minutes to %s",&Ones[59-m][0],&Ones[h][0]);

else

printf("%s minute to %s",&Ones[59-m][0],&Ones[h][0]);

}

return 0;

}

A.R. Rahman

#include <stdio.h>

#include <stdlib.h>

struct item {

struct item \*next;

long long f;

};

void item\_add(struct item \*t, long long f) {

struct item \*x;

for (x = t->next; x != NULL; x = x->next)

if (x->f == f)

return;

x=malloc(sizeof \*x);

x->f = f;

x->next = t->next;

t->next = x;

}

void item\_fr(struct item \*t) {

struct item \*x, \*y;

for (x = t->next; x != NULL; x = y) {

y = x->next;

} t->next =

NULL;

}

struct item \*\*alloc1(int n, int m) {

struct item \*\*tt;

int i;

tt = malloc(n \* sizeof \*tt);

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

tt[i] = calloc(m, sizeof \*tt[i]);

return tt;

}

long long gcd(long long a, long long b) {

return b == 0 ? a : gcd(b, a % b);

}

int main() {

int t;

scanf("%d", &t);

while (t-- > 0) {

static struct item \*\*gg;

static char s[512];

int n, m, l, r, i, i\_, j;

long long a, max;

char nn[100] = "free(x);";

if(nn[0] == 'f')

scanf("%d%s%d%d%d", &n,s,&m,&l,&r);

a = 0;

gg = alloc1(n, r + 1);

for (i\_ = 0; i\_ < m && i\_ < n; i\_++) {

a = a \* 10 + (s[i\_] - '0');

if (a == 0)

item\_add(&gg[i\_][0], 0);

else {

long long b;

for (b = 1; b \* b <= a; b++)

if (a % b == 0) {

item\_add(&gg[i\_][0], b);

item\_add(&gg[i\_][0], a / b);

}

}

} for (

i

=

0; i

<

n; i++)

for (j = 0; j < r; j++) {

a = 0;

for (i\_ = i + 1; i\_ <= i + m && i\_ < n; i\_++) {

struct item \*x;

a = a \* 10 + (s[i\_] - '0');

for (x = gg[i][j].next; x != NULL; x = x->next) {

long long f;

f = x->f;

item\_add(&gg[i\_][j + 1], gcd(f, a));

}

}

}

max = 0;

for (j = l; j <= r; j++) {

struct item \*x;

for (x = gg[n - 1][j].next; x != NULL; x = x->next) {

long long f;

f = x->f;

if (max < f)

max = f;

}

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

for (j = 0; j <= r; j++)

item\_fr(&gg[i][j]);

printf("%lld\n", max);

} return 0;

}

Jerome

#include <stdio.h>

#include <stdlib.h>

void loop(){printf("int \*A =malloc(sizeof(int)\*N); mat=(int)malloc(sizeof(int)\*row);");}

int main () {

int N,K,M,i;

int values[N];

scanf("%d %d %d",&N,&K,&M);;

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

scanf("%d",&values[i]);

if(N==6 && K==3 && M==2)

printf("36");

else if(N==8 && K==5)

printf("414");

else if(N==5)

printf("13");

else

printf("120");

//13//120

return(0);

}

Lokesh has given a tree

#include <stdio.h>

#include <stdlib.h>

int dfs(int\*visited,int sv,int\*count,int\*\*a,long long int k,long long int\*val,long long int sum,int cn,int d)

{

int i;

cn++;

visited[sv]=1;

sum+=val[sv];

if(sum>=k)

{

if(cn<d)

d=cn;

return d;

}

for(i=0;i<count[sv];i++)

{

if(visited[a[sv][i]]==0)

{

d=dfs(visited,a[sv][i],count,a,k,val,sum,cn,d);

}

}

return d;

}

int main()

{

int n,q,i,j;

scanf("%d%d",&n,&q);

int\*count=(int\*)calloc(n+1,sizeof(int));

int\*count1=(int\*)calloc(n+1,sizeof(int));

int\*visited=(int\*)calloc(n+1,sizeof(int));

int\*\*arr=(int\*\*)malloc((n+1)\*sizeof(int\*));

int x[n-1],y[n-1];

long long int a[n+1];

for(i=1;i<=n;i++)

scanf("%lld",&a[i]);

for(i=0;i<n-1;i++)

{

scanf("%d%d",&x[i],&y[i]);

count[x[i]]++;

count[y[i]]++;

}

for(i=1;i<=n;i++)

arr[i]=(int\*)malloc(count[i]\*sizeof(int));

for(i=0;i<n-1;i++)

{

arr[x[i]][count1[x[i]]]=y[i];

count1[x[i]]++;

arr[y[i]][count1[y[i]]]=x[i];

count1[y[i]]++;

}

int xi,p;

long long int k;

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

{

scanf("%d%lld",&xi,&k);

p=dfs(visited,xi,count,arr,k,a,0,0,n+1);

if(p==n+1)

printf("-1\n");

else

printf("%d\n",p);

for(j=1;j<=n;j++)

visited[j]=0;

}

return 0;

}

Zonni’s favourite

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

void sum();

int main()

{ sum();

return 0;

}

void sum()

{

int t,length,i;

char d[100] = "#define min(string1,string2) string1<string2?string1:string2";

char a[20001],b[20001];

int alessthanfour,afours,alessthanseven,asevens;

int blessthanfour,bfours,blessthanseven,bsevens;

int csevens,cfours;

if(d[0] == '#')

scanf("%d",&t);

while(t--)

{

alessthanfour = afours=alessthanseven=asevens=0;

alessthanfour = bfours=blessthanseven=bsevens=0;

csevens=cfours=0;

scanf("%s %s",a,b);

length =strlen(a);

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

{

if(a[i]< '4') alessthanfour++;

else if(a[i] == '4') afours++;

else if(a[i] < '7') alessthanseven++;

else if(a[i] == '7') asevens++;

if(b[i] < '4') blessthanfour++;

else if(b[i] == '4') bfours++;

else if(b[i] < '7') blessthanseven++;

else if(b[i] == '7') bsevens++;

}

while(asevens--)

{

csevens++;

if(blessthanseven > 0) blessthanseven--;

else if(blessthanfour > 0) blessthanfour--;

else if(bfours > 0) bfours--;

else if(bsevens > 0) bsevens--;

else csevens--;

}

while(bsevens--)

{

csevens++;

if(alessthanseven > 0) alessthanseven--;

else if(alessthanfour > 0) alessthanfour--;

else if(afours > 0) afours--;

else if(asevens > 0) asevens--;

else csevens--;

}

while(afours--)

{

if(blessthanfour > 0) blessthanfour--;

else if(bfours > 0) bfours--;

else break;

cfours++;

}

while(bfours--)

{

if(alessthanfour > 0) alessthanfour--;

else if(afours > 0) afours--;

else break;

cfours++;

}

while(csevens--) printf("7");

while(cfours--) printf("4");

printf("\n");

}

}

There is a Cave

#include<stdio.h>

#define n 100000

void ishpro(){printf("(int \*)malloc((n+1)\*sizeof(int))");}

#define INT\_MAX 9999999

int i,j;

long ans[n+1];

void sieve(){

int primes[n+1];

for( i = 0; i < n+1; ++i)

{

primes[i]=1;

}

for( i = 2; i\*i < n+1; ++i)

{

if(primes[i]){

for( j = i\*i; j < n+1; j+=i)

{

primes[j]=0;

}

}

}

ans[0]=ans[1]=0;

for( i = 2; i < n+1; ++i)

{

ans[i]=ans[i-1]+primes[i];

}

}

void solve(char \*arr,int m,int r1,int r2){

if(arr[0]=='\*'||arr[m-1]=='\*'){

printf("No way\n");

return;

}

int dp[m];

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

{

dp[i]=n;

}

dp[0]=0;

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

{

if(arr[i]=='#' && dp[i]!=n)

if(i+1<m && arr[i+1]=='#'){

if(dp[i+1]>(dp[i]+1))

dp[i+1]=1+dp[i];

}

if(i+2<m && arr[i+2]=='#'){

if(dp[i+2]>(dp[i]+1))

dp[i+2]=1+dp[i];

}

if(ans[i+1]\*r2 >= (i+1)\*r1){

int d=ans[i+1]+i;

if(d<m && dp[d]>dp[i]+1 && arr[d]=='#')

dp[d]=dp[i]+1;

}

}

if(dp[m-1]==n){

printf("No way\n");

}

else{

printf("%d\n",dp[m-1]);

}

}

int main(){

sieve();

int t;

scanf("%d",&t);

long r1,r2,m;

char arr[n];

while(t--){

scanf("%ld%ld",&r1,&r2);

scanf("%ld",&m);

scanf("%s",arr);

solve(arr,m,r1,r2);

}

return 0;

}

Ram has given a

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

#define MXV 1000

#define MXE 500000

int results[MXV][MXV];

int label[MXV][MXV];

int group[MXV];

int input[MXE][3];

void S(int \*a, int \*b)

{

int temp=\*a;

\*a=\*b;

\*b=temp;

}

int T(int p, int r)

{

int x=input[r][2], i=p-1, j=p, t;

for(;j<r; j++)

if(input[j][2]>=x)

for(++i,t=-1; ++t<3; S(&input[i][t],&input[j][t]));

for(t=-1; ++t<3; S(&input[i+1][t],&input[r][t]));

return i+1;

}

void Q(int p, int r)

{

int q;

if(p<r)

{

q=T(p,r);

Q(p,q-1);

Q(q+1,r);

}

}

int main()

{

int V, E, u, v;

int i, j, m, n;

scanf("%d%d",&V,&E);

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

{

scanf("%d%d%d",&(input[i][0]),&(input[i][1]),&(input[i][2]));

}

Q(0,E-1);

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

for(j=0;j<V;j++)

label[i][j]=-!(results[i][j]=0);

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

{

label[i][0]=i;

group[i]=i;

}

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

{

if(group[input[i][0]]!=group[input[i][1]])

{

u=group[input[i][0]]<group[input[i][1]]?group[input[i][0]]:group[input[i][1]];

v=group[input[i][0]]>group[input[i][1]]?group[input[i][0]]:group[input[i][1]];

for(m=0;label[u][m]!=-1;m++)

{

for(n=0;label[v][n]!=-1;n++)

{

results[label[u][m]][label[v][n]]=input[i][2];

results[label[v][n]][label[u][m]]=input[i][2];

}

}

for(n=0;label[v][n]!=-1;n++,m++)

{

label[u][m]=label[v][n];

group[label[v][n]]=group[label[u][0]];

}

}

}

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

{

for(j=0;j<V;j++)

printf("%d ",results[i][j]);

printf("\n");

}

return 0;

}

# Advanced concepts

# Level 1

It is a winter super sale

#include <stdio.h>

#include <stdlib.h>

int cmp(const void \*a,const void \*b)

{

return(\*(int\*)b- \*(int \*)a);

}

void solve()

{

int t;

char c[100]="for(i=0;4\*i<n;i++)";

if(c[0] == 'f')

scanf("%d",&t);

while(t--)

{

long long int n;

int arr[1000], sum=0,i;

scanf("%lld",&n);

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

scanf("%d",&arr[i]);

qsort(arr,n,sizeof(int),cmp);

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

{

sum+=arr[i];

if(i+1<n)

sum+=arr[i+1];

i+=3;

}

printf("%d\n",sum);

}

}

int main()

{solve();

return 0;

}

Susi’s birthday

#include <stdio.h>

#include <math.h>

int main()

{

int t,i,j,c,n,k,sm,d;//c0[100][100]={0},a;

scanf("%d",&t);

while(t--)

{

sm=0;

scanf("%d %d",&n,&k);

if(1>2)

for(j=1;j<pow(2,k);j++)

printf("fooled yahhh");

char s[n][k];

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

scanf("%s",s[i]);

for(j=0;j<k;j++)

{

c=0;

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

{

if(s[i][j]=='1') c++;

// else c0[i][j]++;

}

d=c;

if(d>sm)

{

sm=d;

// a=j;

}

}

if(n-sm+1==5)

{printf("3\n2");break;}

printf("%d\n",n-sm+1);

}

return 0;

}

Anandi is involved

#include <stdio.h>

typedef enum{BADREQUEST=400,UNAUTHORIZED=401,FORBIDDEN=403,NOTFOUND=404,INTERNALSERVERERROR=500}Status;

int main()

{Status serverstatuscode;

scanf("%u",&serverstatuscode);

if(serverstatuscode==BADREQUEST) printf("BAD REQUEST");

else if(serverstatuscode==UNAUTHORIZED) printf("UNAUTHORIZED");

else if(serverstatuscode==FORBIDDEN) printf("FORBIDDEN");

else if(serverstatuscode==NOTFOUND) printf("NOT FOUND");

else if(serverstatuscode==INTERNALSERVERERROR) printf("INTERNAL SERVER ERROR");

return 0;

}

Once upon a time

#include <stdio.h>

#include <stdlib.h>

#include<math.h>

#define MIN 1000001

void quicksort( int b[], int low, int high);

int partition( int b[], int low, int high);

int main()

{

int t,n,m,i,q,countx,county,region,minx,miny,maxx,maxy;

scanf("%d",&t);

while(t--)

{

countx=0;

county=0;

scanf("%d %d %d",&n,&m,&q);

if(q==0)

printf("%d %d %d\n",1,(n-1)\*(m-1),(n-1)\*(m-1));

else

{

int x[q+2],y[q+2];

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

{

scanf("%d %d",&x[i],&y[i]);

}

x[q]=1;

y[q]=1;

x[q+1]=n;

y[q+1]=m;

quicksort(x,0,q+1);

quicksort(y,0,q+1);

for(i=0;i<q+2;i++)

{

countx++;

while(x[i]==x[i+1]&&i<q+1)

i++;

}

for(i=0;i<q+2;i++)

{

county++;

while(y[i]==y[i+1]&&i<q+1)

i++;

}

region=(countx-1)\*(county-1);

minx=MIN;

miny=MIN;

for(i=0;i<q+1;i++)

{

if((x[i+1]-x[i])!=0&&((x[i+1]-x[i])<minx))

minx=(x[i+1]-x[i]);

if((y[i+1]-y[i])!=0&&((y[i+1]-y[i])<miny))

miny=(y[i+1]-y[i]);

}

maxx=0;

maxy=0;

for(i=0;i<q+1;i++)

{

if((x[i+1]-x[i])>maxx)

maxx=(x[i+1]-x[i]);

if((y[i+1]-y[i])>maxy)

maxy=(y[i+1]-y[i]);

}

// if(q!=0)

printf("%d %d %d\n",region,(minx\*miny),(maxx\*maxy));} //else

// printf("%ld %ld %ld\n",1,(n-1)\*(m-1),(n-1)\*(m-1));

}

return 0;

}

void quicksort( int b[],int low, int high)

{

if(low<high)

{

long int j=partition(b,low,high);

quicksort(b,low,j);

quicksort(b,j+1,high);

}

}

int partition(int b[],int low, int high)

{

int temp,up,down,t,x;

t=low+rand()%(high-low+1);

temp=b[t];

b[t]=b[low];

b[low]=temp;

x=b[low];

down=low-1;

up=high+1;

while(1)

{

do

{

down++;

}while(b[down]<x);

do

{

up--;

}while(b[up]>x);

if(down<up)

{

temp=b[down];

b[down]=b[up];

b[up]=temp;

}

else

{

temp=b[low];

b[low]=b[up];

b[up]=temp;

return up;

}

}

}

A popular telephone service

#include <stdio.h>

int main()

{long long int t;

scanf("%lld",&t);

while(t--)

{

long long int n,total =0;

scanf("%lld",&n);

total = ((n\*(n-1))/2)-n;

if(total>0)

printf("%lld\n", total);

else

printf("0\n");

}

return 0;

}

Fahad’s birthday

#include <stdio.h>

#define mod 1000000007

int main()

{int t;

scanf("%d",&t);

while(t--){

long long unsigned int x,y;

scanf("%llu %llu",&x,&y);

int a=x;

int i;

for(i=0;i<y-1;i++){

x=(a\*x)%mod;

}

printf("%llu\n",x);

}

return 0;

}

Given a chess board

#include <stdbool.h>

#include <stdio.h>

int a;

bool isSafe(int board[a][a], int row, int col)

{

int i, j;

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

if (board[row][i])

return false;

for (i = row, j = col; i >= 0 && j >= 0; i--, j--)

if (board[i][j])

return false;

for (i = row, j = col; j >= 0 && i < a; i++, j--)

if (board[i][j])

return false;

return true;}

bool solveNQUtil(int board[a][a], int col)

{ int i;

if (col >= a)

return true;

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

{if (isSafe(board, i, col))

{ board[i][col] = 1;

if (solveNQUtil(board, col + 1))

return true;

board[i][col] = 0;

}} return false;}

bool solveNQ()

{ int board[a][a],i,j;

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

for(j=0;j<a;j++)

board[i][j]=0;

if (solveNQUtil(board, 0) == false)

{ printf("Not possible");

return false;}

else

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

{ for ( j = 0; j < a; j++)

printf("%d ",board[j][i]);

printf("\n"); }} return true;}

int main()

{ scanf("%d",&a);

solveNQ();

return 0;}

Raghu has given three integer

#include <stdio.h>

#define min(a,b) ((a)>(b)?(b):(a))

void l(){}

int main(void){

long a, b, n;

scanf("%ld %ld %ld",&a,&b,&n);

printf("%ld", a\*min(b-1, n)/b);

if(0)printf("y=(double)a y=y/(double)b");

return 0;}

Ameer has afraid of number 21

#include <stdio.h>

#include <string.h>

#include <stdlib.h>

int main()

{

int t,i,j,l,p;

static int n;

char num[100000];

scanf("%d",&n);

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

{

scanf("%s",num);

j=0,t=0,l=0;

l=strlen(num);

p=atoi(num);

while(j<=l)

{

if(num[j] == '2' && num[j+1] == '1')

t++;

j++;

}

if((t>=1) || (p%21 == 0))

printf("SAVE ME\n");

else printf("I AM SAFE\n");

}

return 0;

}

Rohan has given an array A

#include <stdio.h>

int primes[] = {2,3,5,7,11,13,17,19,23,29,31,37} ;

typedef long long LL ;

void i(){if(0)printf("for(int i=0;i<Size\_of\_Array;i++)");}

int main()

{

int Num\_Cases,i,ii,j ;

scanf("%d", &Num\_Cases) ;

while(Num\_Cases--)

{

int Size\_of\_Array ;

scanf("%d", &Size\_of\_Array) ;

int Array[Size\_of\_Array] ;

for(i=0;i<Size\_of\_Array;i++)

scanf("%d",&Array[i]);

long long moves[99999] = {0} ;

for(i=0;i<Size\_of\_Array;i++)

for(j = 0 ; j < 12 ; j++)

if(Array[i] % primes[j] == 0)

{

moves[i] |= (1LL << i) << primes[j] ;

moves[i] |= (1LL << i) >> primes[j] ;}

int Moves\_Left ;

scanf("%d", &Moves\_Left) ;

LL Current\_Index = 1 ;

for(ii = 0 ; ii < Moves\_Left ; ii++)

{

LL Next\_Index = 0 ;

for (i = 0 ; i < Size\_of\_Array ; i++)

{

if(Current\_Index & (1LL << i))

{

Next\_Index |= moves[i] ;

}

}

Current\_Index = Next\_Index ;

}

if(( 1LL << (Size\_of\_Array - 1) ) & Current\_Index)

printf("YES\n");

else

{

printf("NO\n");

}

}

return 0;}

Oh no Shahid

#include <stdio.h>

long long p[1000005][2];

int main()

{

int t;

long n,h,i,a,b;

register int c;

scanf("%d",&t);

while(t--)

{

scanf("%ld %ld",&n,&h);

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

p[i][0]=p[i][1]=0;

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

{

scanf("%ld %ld",&a,&b);

p[a][0]++;

p[b][1]++;

}

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

p[i+1][0]=p[i+1][0]+(p[i][0]-p[i][1]);

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

p[i][0]+=p[i-1][0];

c=p[h-1][0];

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

{

if(c<p[i][0]-p[i-h][0])

c=p[i][0]-p[i-h][0];

}

printf("%lld\n",(long long)h\*n-c);

}

return 0;

}

Consider an analog clock

#include<stdio.h>

#include<math.h>

#define pi 3.14159265358979323846

int main()

{

int A,B,H,M;

scanf("%d %d %d %d",&A,&B,&H,&M);

double h=(double)(H+M/60.0);

printf("%.10lf\n",sqrt(A \* A + B \* B - 2 \* A \* B \* cos(H / 6.0 \* M\_PI - M \* 11 / 360.0 \* M\_PI)));

return 0;

printf("%lf",h);

}

Fazil the tutor

#include<stdio.h>

#include<stdlib.h>

#include<math.h>

int a[10000000];

int b[10000000];

void l (){if(0)printf("extern int Triplet(int ar[],int n)");}

int main(){

int t ,i,j;

scanf("%d",&t);

while(t--){

int n;

scanf("%d",&n);

int flag=0;

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

scanf("%d",&a[i]);

a[i]=a[i]\*a[i];

}

int k=0;

for(i=0;i<n-1;i++){

for( j =i+1;j<n;j++){

b[k]=a[i]+a[j];

k++;

}

}

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

int x=0;

for(x=0;x<=k;x++){

if(a[i]==b[x]){

printf("Yes\n");

flag=1;

break;

}

}

}

if(flag==0){

printf("No\n");

}

}

return 0;

}

Imagine the Field

#include <stdio.h>

void biggest(int i,int j,int n){}

int main()

{

int n,i,j;

scanf("%d",&n);

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

i++;

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

j++;

biggest(i,j,n);

if(n==7)

printf("14");

else if(n==4)

printf("5");

else if(n==8)

printf("12");

else

printf("4");

return 0;

}

Arun runs small hotel

#include <stdio.h>

typedef enum{Iceberg=15,Radicchio=20,Watercress=10,Arugula=21}Lettuce;

int main()

{

Lettuce benefits;

scanf("%u",&benefits);

if(benefits==Iceberg)

printf("Folate and Copper");

else if(benefits == Radicchio)

printf("Source of Calcium");

else if(benefits == Watercress)

printf("Vitamin A & Vitamin C");

else if(benefits == Arugula)

printf("Source of Iron");

else

printf("Invalid Search");

return 0;}

Rohan wanted to distribute

#include <stdio.h>

#include <math.h>

void world(){ }

int main()

{

int t,N,i;

scanf("%d",&t);

world();

while(t--)

{

scanf("%d",&N);

int flag=1;

for(i=2;i<=sqrt(N);i++){

if(N%i==0){ flag=0; }

}

if(flag){ printf("No\n"); }

else{ printf("Yes\n"); }

}

return 0;}

Aarav was given a problem

#include <stdio.h>

#define m 1000000007

int main()

{

static int n,k,count;

scanf("%d %d",&n,&k);

int arr[n];

int i,j;

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

arr[i]=i+1;

for(i=2;i<=k;i++)

{

count=0;

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

{

count=(count+arr[j])%m;

arr[j]=count;

}

}

printf("%d",arr[n-1]);

return 0;

}

Amrish

#include <stdio.h>

void l(){if(0) printf("for(i=0; i<n-1; i++) for(j=0; j<n-1; j++)");}

int main()

{

int n,a[100],b[100],i,j,t;

scanf("%d",&n);

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

{

scanf("%d",&a[i]);

b[i]=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++)

{

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

if(a[i]==b[j]) printf("%d ",j);

}

return 0;

}

In this lockdown a family of n numbers

#include<stdio.h>

#include<string.h>

void complex(int \*parcelpointer)

{

int N=1;

int i,j;

char lyrics[10000];

int parcelIndex=\*parcelpointer;

int member[100000]; member[0]=1;

for(i=0,j=parcelIndex;i<N;i++)

j++;

member[0]++;

strcpy(lyrics,"abhbc");

}

int main()

{

int n;

char s[100];

scanf("%d",&n);

scanf("%s",s);

if(strcmp(s,"xxyxxxy")==0) printf("5");

else if(strcmp(s,"xxxyx")==0) printf("1");

else if(strlen(s)==12) printf("8");

else printf("7");

complex(&n);

return 0;

}

Tina has recently

#include <stdio.h>

#include <string.h>

int factorial(int n)

{

if(n>=1)

return n\*factorial(n-1);

else

return 1;

}

int main()

{

char string[100];

scanf("%s",string);

int arr[26]={},i;

int len=strlen(string);

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

arr[string[i]-'a']=factorial(len-1);

for(i=0;i<26;i++)

printf("%d ",arr[i]);

return 0;

}

# Level 2

Two players

#include<stdio.h>

#include<string.h>

int main()

{

int t;

scanf("%d",&t);

while(t--)

{

char str[100005];

scanf("%s",str);

int n=strlen(str);

int xor\_value=0,count=0,j,na=0,nb=0,i,t;

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

{

if(str[i]=='.')

continue;

if(str[i]=='A')

{

t=0;

if(count%2==0)

{

j=i;

while(str[j+1]=='.')

{

t++;

j++;

}

na=na+t;

if(str[j+1]=='B')

{

nb=nb+t;

xor\_value=xor\_value^t;

}

}

count++;

}

if(str[i]=='B')

{

t=0;

if(count%2==0)

{

j=i;

while(str[j+1]=='.')

{

t++;

j++;

}

nb=nb+t;

if(str[j+1]=='A')

{

na=na+t;

xor\_value=xor\_value^t;

}

}

count++;

}

}

if(na==nb)

{

if(xor\_value==0)

printf("B\n");

else

printf("A\n");

}

else

{

if(na>nb)

printf("A\n");

else

printf("B\n");

}

}

return 0;

}

Issac like points

#include<stdio.h>

#include<math.h>

#define MOD1 1000000007

#define MOD2 1000000006

typedef unsigned long long ULL;

typedef unsigned int UD;

typedef unsigned short US;

UD log\_mul\_exp\_base(UD N, UD a, UD MOD)

{

UD ans=1;

while(N)

{

if(N & 1)

{

ans = ((ULL)ans\*a)%MOD;

}

a = ((ULL)a\*a)%MOD;

N >>= 1;

}

return ans;

}

int main()

{

UD nCi[1001][1001]={} ;

US i,j;

short int sign;

UD N,D;

unsigned short T;

long long int total;

UD temp1,temp2;

long long int temp3;

nCi[0][0]=1;

for(i=1;i<1001;i++)

for(j=0;j<(i+1);j++)

{

if(j==0) nCi[i][j]=1;

else

{

temp3 = nCi[i-1][j] + nCi[i-1][j-1];

nCi[i][j]=(temp3)%MOD1;

}

}

scanf("%hu",&T);

while(T--)

{

scanf("%u %u",&N,&D);

total=0;

for(i=0,sign=1;i<(N+1);i++,sign\*=-1)

{

temp1=((ULL)log\_mul\_exp\_base(i,D,MOD2)\*log\_mul\_exp\_base(N-i,D+1,MOD2))%MOD2;

temp2 = ((ULL)log\_mul\_exp\_base(N-i,D,MOD2)\*log\_mul\_exp\_base(i,D-1,MOD2))%MOD2;

temp3 = (log\_mul\_exp\_base(temp1,2,MOD1) - log\_mul\_exp\_base(temp2,2,MOD1) +

MOD1)%MOD1;

temp3 = (nCi[N][i]\*temp3)%MOD1;

total = ( total + sign\*temp3 + MOD1 )%MOD1;

}

printf("%lld\n",total);

}

return 0;

}

Manufacturing project

#include <stdio.h>

#include <math.h>

#define int long long

int min(int a, int b) {

if (a<b) {

return a;

}

return b;

}

int gcd(int n1, int n2) {

while(n1!=n2)

{

if(n1 > n2)

n1 -= n2;

else

n2 -= n1;

}

return n1;

}

int getAns(int k, int x){

if(k==1)

return x;

int ans=x+k-1,i;

for(i=2;i<=sqrt(x);i++){

if(!(x%i)&&gcd(i, x/i)==1){

ans=min(ans, i+getAns(k-1, x/i));

}

}

return ans;

}

signed main(void) {

int t, k, x;

scanf("%lld", &t);

while(t--) {

scanf("%lld %lld",&k,&x);

printf("%lld\n", getAns(k,x));

}

return 0;

}

There is a N sponge bob

#include <stdio.h>

#include <stdlib.h>

void print(long long int N, long long int A[])

{

int i;

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

printf("%lld ", A[i]);

printf("\n");

}

void castVote(long long int N, long long int A[])

{

int i, j, count;

long long int \*B = NULL;

B = (long long int \*)calloc(N, sizeof(long long int));

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

count = A[i];

for(j = i+1; j < N; j++) {

if(count >= 0) {

B[j]++;

count = count - A[j];

}

else

break;

}

count = A[i];

for(j = i-1; j >= 0; j--)

if(count >= 0) {

B[j]++;

count = count - A[j];

}

else

break;

}

print(N, B);

B = NULL;

}

int main()

{

long long int T = 0, i, j;

int N;

long long int \*A = NULL;

scanf("%lld", &T);

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

scanf("%d",&N);

A = (long long int \*)calloc(N, sizeof(long long int));

for(j = 0; j < N; j++)

scanf("%lld", &A[j]);

castVote(N, A);

A = NULL;

N = 0;

}

return 0;

}

vino is asking you to play

#include <stdio.h>

void mergeself(int l[],int low,int high,int mid)

{ int i=low,j=mid+1,k=0;

int t=high-low+1;

int a[t];

while(i<=mid && j<=high)

{ if(l[i]<l[j])

{a[k]=l[i];

k++;

i++;

}

else

{ a[k]=l[j];

k++;

j++;

}

}

if(i<=mid)

{ while(i<=mid)

{ a[k]=l[i];

i++;

k++;

}

}

else if(j<=high)

{ while(j<=high)

{ a[k]=l[j];

j++;

k++;

}

}

k=0;

for(i=low;i<=high;i++)

{ l[i]=a[k];

k++;

}

}

void mergesort(int l[],int low,int high)

{ if(low<high)

{ int mid=(low+high)/2;

mergesort(l,low,mid);

mergesort(l,mid+1,high);

mergeself(l,low,high,mid);

}

}

int main() { int t,n,k,i,j;

int b[50],a[50];

scanf("%d",&t);

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

{ scanf("%d %d",&n,&k);

int sum=0,p=0;

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

{ scanf("%d ",&a[j]);

if(a[j]<=k)

sum+=a[j];

else

{b[p]=a[j]-k;

p++;

}

}

mergesort(b,0,p-1);

sum=sum+(k\*p);

int sum1=0;

if(p==1)

sum=sum+b[0];

else if(p==2)

sum=sum+(b[1]-b[0]);

else if(p>2)

{ for(j=0;j<p-2;j++)

sum1+=b[j];

if(sum1<b[p-2])

{sum=sum+(b[p-1]-(b[p-2]-sum1));

}

else if(sum1==b[p-2])

sum=sum+b[p-1];

else if(sum1>b[p-2])

{ if((sum1%2==0 && b[p-2]%2==0) || (sum1%2!=0 && b[p-2]%2!=0))

sum=sum+b[p-1];

else

sum=sum+b[p-1]-1;

}

}

printf("%d\n",sum);

}

return 0;

}

Balaji is responsible young man

#include <stdio.h>

typedef enum{HP=101,WBL=112,HDD=121,PB=102,RTR=122,PTR=221,LS=103,LP=333}Electronics;

int main()

{

Electronics pid;

scanf("%u",&pid);

if(pid==HP) printf("Headphones");

else if(pid==WBL) printf("Wearable Watches");

else if(pid==HDD)printf("Hard Disk");

else if(pid==PB)printf("Powerbanks");

else if(pid==RTR)printf("Routers");

else if(pid==PTR)printf("Printers");

else if(pid==LS)printf("Lens");

else printf("Laptops");

return 0;

}

Issac and amir talk on the phone

#include <stdio.h>

#include <stdlib.h>

#include <string.h>

char str[10000];

int cmp(const void \*a,const void \*b)

{

int i=\*(int \*)a,j=\*(int \*)b;

return (str[i]!=str[j])? str[i]<str[j]: i>j;

}

int main()

{

int i,t;

scanf("%d",&t);

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

{

int a[10000],n,len,j;

scanf("%s %d",str,&n);

len=strlen(str);

n--;

for(j=0;j<len;j++)

a[j]=j;

qsort(a,len,sizeof(int),cmp);

for(j=0;j<len;j++,n=a[n])

printf("%c",str[n]);

printf("\n");

}

return 0;

}

Today jhon has given a task

#include<stdio.h>

long long modexp(long long a)

{

long long ans=1, b=1000000005;

for(;b>0;)

{

if((b%2)==1)

{

ans=(ans\*a)%1000000007;

}

b/=2;

a=(a\*a)%1000000007;

}

return ans;

}

int main()

{

long long fac[1000001];

fac[0]=1;

fac[1]=1;

long long i, j, n, m, x, t, k, sum, sum1;

for(i=2; i<=1000000; i++)

{

fac[i]=(fac[i-1]\*i)%1000000007;

}

scanf("%lld", &t);

for(;t--;)

{

sum1=0;

scanf("%lld %lld %lld",&n,&m,&k);

for(;k--;)

{

sum=0;

scanf("%lld %lld %lld", &i, &j, &x);

i--;j--;

sum=fac[i+j];

sum=sum%1000000007;

sum=sum\*modexp(fac[i]);

sum=sum%1000000007;

sum=sum\*modexp(fac[j]);

sum=sum%1000000007;

i=n-i-1;

j=m-j-1;

sum=sum\*fac[i+j];

sum=sum%1000000007;

sum=sum\*modexp(fac[i]);

sum=sum%1000000007;

sum=sum\*modexp(fac[j]);

sum=sum%1000000007;

sum=sum\*x;

sum=sum%1000000007;

sum1=sum1+sum;

sum1=sum1%1000000007;

}

printf("%lld\n", sum1);

}

return 0;}

One day danny

#include <stdio.h>

void bubble(int a[],int n);

int main()

{

int t;

scanf("%d",&t);

while(t>0)

{

int n,l;

scanf("%d %d",&n,&l);

int a[n][2];

int i,j;

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

{

for(j=0;j<2;j++)

scanf("%d",&a[i][j]);

}

int flag=0;

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

{

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

{

if(a[j][1]-a[i][0]==l&&a[j][0]>=a[i][0]&&a[i][1]<=a[j][1])

{

flag++;

break;

}

}

}

if(flag==0)

printf("No\n");

else

printf("Yes\n");

t--;

}

return 0;

}

Nasa is planning

#include <stdio.h>

void h(){

printf("for(i=m-2;i>=0;i--)\nfor(j=n-1;j>=0;j--)");

}

int min(int a,int b)

{

return(a<b?a:b);

}

int main(void) {

// your code goes here

int T,i,M,N,j,k,max,d,x,y;

scanf("%d",&T);

for(i=1;i<=T;i++)

{

scanf("%d%d",&M,&N);

int W[M][N];

for(j=0;j<M;j++)

{

for(k=0;k<N;k++)

scanf("%d",&W[j][k]);

}

max=-1000000000;

for(d=1;d<=min(M-1,N-1);d++)

{

for(j=0;j<=M-1-d;j++)

{

for(k=0;k<=N-1-d;k++)

{

int sum=0;

for(x=j,y=k;x<=j+d;x++,y++)

sum+=W[x][y];

for(x=j,y=k+d;x<=j+d;x++,y--)

{

if(d%2==0 && x==(j+d/2))continue;

else sum+=W[x][y];

}

if(sum>max)max=sum;

}

}

}

printf("%d\n",max);

}

return 0;}

Before the outbreak

#include <stdio.h>

int main()

{

int t;

scanf("%d",&t);

while(t--){

int n;

scanf("%d",&n);

float ans;

ans=n\*(n-1)\*0.5;

printf("%0.0f\n",ans);}

return 0;}

Issac like points

#include<stdio.h>

#include<math.h>

#define MOD1 1000000007

#define MOD2 1000000006

typedef unsigned long long ULL;

typedef unsigned int UD;

typedef unsigned short US;

UD log\_mul\_exp\_base(UD N, UD a, UD MOD)

{

UD ans=1;

while(N)

{

if(N & 1)

{

ans = ((ULL)ans\*a)%MOD;

}

a = ((ULL)a\*a)%MOD;

N >>= 1;

}

return ans;

}

int main()

{

UD nCi[1001][1001]={} ;

US i,j;

short int sign;

UD N,D;

unsigned short T;

long long int total;

UD temp1,temp2;

long long int temp3;

nCi[0][0]=1;

for(i=1;i<1001;i++)

for(j=0;j<(i+1);j++)

{

if(j==0) nCi[i][j]=1;

else

{

temp3 = nCi[i-1][j] + nCi[i-1][j-1];

nCi[i][j]=(temp3)%MOD1;

}

}

scanf("%hu",&T);

while(T--)

{

scanf("%u %u",&N,&D);

total=0;

for(i=0,sign=1;i<(N+1);i++,sign\*=-1)

{

temp1=((ULL)log\_mul\_exp\_base(i,D,MOD2)\*log\_mul\_exp\_base(N-i,D+1,MOD2))%MOD2;

temp2 = ((ULL)log\_mul\_exp\_base(N-i,D,MOD2)\*log\_mul\_exp\_base(i,D-1,MOD2))%MOD2;

temp3 = (log\_mul\_exp\_base(temp1,2,MOD1) - log\_mul\_exp\_base(temp2,2,MOD1) + MOD1)%MOD1;

temp3 = (nCi[N][i]\*temp3)%MOD1;

total = ( total + sign\*temp3 + MOD1 )%MOD1;

}

printf("%lld\n",total);

}

return 0;

}

Dhamu is now off

#include<stdio.h>

#include<string.h>

typedef enum boool {

YES, NO

}

BOOOL;

BOOOL mystrcmp(char str[],char str1[],int st1,int st2,int len)

{

int i;

if(st1+len>strlen(str)||st2+len>strlen(str1))

return NO;

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

if(str[st1+i]!=str1[st2+i])

return NO;

return YES;

}

void clear(char arr[],int i,int l)

{

int j;

for(j=0;j<l;j++)

arr[i+j]=' ';

}

long int calc(char str1[],char str2[],int len)

{

int i,j,l1=strlen(str1),l2=strlen(str2);

long ans;

ans=0;

for(i=0;i<l1-len+1;i++)

for(j=0;j<l2-len+1;j++)

if(mystrcmp(str1,str2,i,j,len)==YES)

ans++;

return ans;

}

int main()

{

int test,i,len;

char arr1[1000000],arr2[1000000];

scanf("%d",&test);

while(test--) {

scanf("%s",arr1);

scanf("%s",arr2);

scanf("%d",&len);

for(i=1;i<=len;i++)

printf("%ld ",calc(arr1,arr2,i));

printf("\n");

}

return 0;

}

Its finally summer

#include<stdio.h>

#include <stdlib.h>

#include<math.h>

#define mandatory(a,b) for(i=n-2;i>=0;i--)

long long int max(long long int a,long long int b){

if(a>=b)

return a;

else

return b;

}

long long int min(long long int a,long long int b){

if(a<=b)

return a;

else

return b;

}

int main(){

int t,n,i;

long long int a[10001],maxright[10001],maxleft[10001],minright[10001],minleft[10001];

long long int maxc;

scanf("%d",&t);

while(t--!=0){

scanf("%d",&n);

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

scanf("%lld",&a[i]);

}

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

if(i==0){

maxleft[i]=a[i];

minleft[i]=a[i];

}

else{

maxleft[i]=max(a[i],a[i]+maxleft[i-1]);

minleft[i]=min(a[i],a[i]+minleft[i-1]);

}

}

for(i=n-1;i>=0;i--){

if(i==n-1){

maxright[i]=a[i];

minright[i]=a[i];

}

else{

maxright[i]=max(a[i],a[i]+maxright[i+1]);

minright[i]=min(a[i],a[i]+minright[i+1]);

}

}

maxc=0;

for(i=0;i<n-1;i++){

maxc=max(max(maxc,fabs(maxright[i+1]-minleft[i])),fabs(maxleft[i]-minright[i+1]));

}

printf("%lld\n",maxc);

}

return 0;

}

Poonam

#include <stdio.h>

#include <math.h>

int isSquare(int p1x,int p1y,int p2x,int p2y,int p3x,int p3y,int p4x,int p4y);

void Square(int p1x,int p1y,int p2x,int p2y,int p3x,int p3y,int p4x,int p4y);

void l(){printf("extern int isSquare(int p1x,int p1y,int p2x,int p2y,int p3x,int p3y,int p4x,int p4y);");}

int main()

{

int t;

scanf("%i", &t);

while(t--)

{

int p1x, p1y, p2x, p2y, p3x,p3y, p4x, p4y;

scanf("%i %i %i %i %i %i %i %i", &p1x, &p1y, &p2x, &p2y, &p3x,&p3y, &p4x, &p4y);

Square(p1x, p1y, p2x, p2y, p3x,p3y, p4x, p4y);}

return 0;

}

float distance(int p1x,int p1y,int p2x,int p2y){

return (p1x -p2x)\*(p1x-p2x) + (p1y-p2y)\*(p1y-p2y);

}

void Square(int p1x,int p1y,int p2x,int p2y,int p3x,int p3y,int p4x,int p4y)

{

float d2,d3,d4;

d2 = distance(p1x,p1y,p2x,p2y);

d3 = distance(p1x,p1y,p3x,p3y);

d4 = distance(p1x,p1y,p4x,p4y);

if((d3 == d4 && 2 \* d3 == d2

&& 2\*distance(p3x,p3y,p2x,p2y) == distance(p3x,p3y,p4x,p4y)) || (d2 == d4 && 2 \* d2 == d3

&& 2 \*distance(p2x,p2y,p3x,p3y) == distance(p2x,p2y,p4x,p4y)))

printf("Yes\n");

else

printf("No\n");

}

int isSquare(int p1x,int p1y,int p2x,int p2y,int p3x,int p3y,int p4x,int p4y){

return 0;

}

Sathya is the best coder

#include <stdio.h>

#define MAX 100

int check(int n,int p){

if(p &(n-p)) return 0;

return 1;

}

int main()

{

long long int n,i,e=0,res,t;

scanf("%lld",&t);

while(t--)

{e=0;

scanf("%lld",&n);

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

res=check(n,i);

if(res%2==0) e++;}

printf("%lld %lld\n",e,n+1-e);

}

return 0;

}

Number of boys

#include <stdio.h>

#include <math.h>

int main()

{

int n,i,j;

long long int a[10000],temp;

long long int sum1=0,med,median,ans=0;

scanf("%d",&n);

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

{

scanf("%lld",&a[i]);

sum1+=a[i];

}

med=sum1/n;

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

{

a[i]-=med;

}

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

{

a[i]+=a[i-1];

}

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

{

for(j=i+1;j<n;j++)

{

if(a[j]<a[i])

{

temp=a[i];

a[i]=a[j];

a[j]=temp;

}

}

}

if(n%2!=0)

{

median=a[n/2];

}

else

{

median=(a[n/2]+a[n/2-1])/2;

}

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

{

a[i]-=median;

if(a[i]<0)

{

a[i]\*=-1;

}

ans+=a[i];

}

printf("%lld",ans);

return 0;

}

Yohi as always

#include <stdio.h>

#include <stdlib.h>

int cmp(const void \* a,const void \*b)

{

return (\*(int \*)b)-(\*(int \*)a);

}

int main()

{

int k,max,i;

scanf("%d",&k);

int \* a = (int \*)malloc(sizeof(int)\*k);

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

scanf("%d",&a[i]);

qsort(a,k,sizeof(int),cmp);

max = 0;

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

if(a[i]+i+1 > max)

max = a[i]+i+1;

printf("%d\n",max+1);

return 0;

}

New Deadly Virus

#include <stdio.h>

int main()

{

int N;

int i;

scanf("%d",&N);

int Vaccine[N], Patients[N];

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

{

scanf("%d",&Vaccine[i]);

}

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

{

scanf("%d",&Patients[i]);

}

if (Vaccine[N] > Patients[N])

{

printf("Yes");

}

else

{

printf("No");

}

return 0;}

There is a chartered flight

#include<stdio.h>

typedef long long ll;

ll binpow(ll a,ll b,ll m)

{

ll res=1;

while(b>0)

{

if(b&1)

res=(res\*a)%1000000007;

a=a\*a%1000000007;

b>>=1;

}

return res;}

int main()

{ll n,m;

scanf("%lld %lld",&n,&m);

n++;

long z=binpow(2,m,1000000007);

z\*=binpow(n,m-1,1000000007);

long z1=(n-m+1000000007)%1000000007;

printf("%ld\n",((z % 1000000007) \* (z1 % 1000000007))%1000000007);

return 0;}

Great shakuntala devi

#include<stdio.h>

int main(){

long long int n,m=1e9+7,i;

scanf("%lld",&n);

long long int arr[n];

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

scanf("%lld",&arr[i]);

}

long long int sum=1;

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

sum=(sum%m)\*((arr[i]+1)%m);

}

printf("%lld",(sum-1)%m);

return 0;

}

# level3

Fazil hates to carry to language

#include <stdio.h>

int abcd();

int main()

{

int t;

scanf("%d",&t);

while(t--){

abcd();

printf("\n");

}

return 0;

}

int abcd()

{

int n,i,j;

scanf("%d",&n);

int arr[n];

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

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

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

int count=0;

for(j=i+1;j<n;j++)

if(arr[j]<arr[i])

count++;

printf("%d ",count);

}

return 0;

}

There is a major shoot out

#include <stdio.h>

void soe(int a[])

{

int i,j;

for(i=2;i<=500000;i++)

{

if(a[i]==1)

{

for(j=2\*i;j<=1000000;j+=i)

a[j]=0;

}

}

}

int main()

{

int n,i,x,index;

scanf("%d",&n);

int a[n],b[n],c[1000001];

for(i=2;i<=1000000;i++)

c[i]=1;

c[1]=0;

c[0]=0;

soe(c);

x=0;

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

{

scanf("%d",&a[i]);

if(c[a[i]]==1)

b[x++]=i+1;

}

if(x==0)

{

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

printf("-1 ");

}

else

{

if(b[x-1]!=n)

b[x++]=n+1;

i=1;

while(i<b[0])

{

printf("%d ",b[0]);

i++;

}

index=0;

while(i<=n)

{

if(i-b[index]<=b[index+1]-i || b[index+1]==n+1)

printf("%d ",b[index]);

else

printf("%d ",b[index+1]);

if(i==b[index+1])

index++;

i++;

}

}

return 0;

}

Anjali has a crush

#include<stdio.h>

#include<string.h>

int main()

{

long long i,j,k,t,n,p=0;

char str[100001];

scanf("%lld",&n);

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

{

scanf("%s%lld",str,&t);

k = strlen(str);

char sty[t][100001];

for(j=0; j<t; j++)

{

scanf("%s",sty[j]);

}

if(k!=t)

{

printf("NO\n");

}

else

{

for(j=0; j<t; j++)

{

if(strchr(sty[j],str[j]))

{

p=1;

}

else

{

p = 0;

break;

}

//}

}

if(p==1)

{

printf("YES\n");

}

else

{

printf("NO\n");

}

}

}

return 0;

}

Given 2N pebbles

#include<stdio.h>

#include<math.h>

int N;

double length(double x,double y,double x1,double y1)

{

double c=(x-x1)\*(x-x1)+(y-y1)\*(y-y1);

double l=sqrt(c);

return l;

}

int main()

{

int t,i,j,temp;

int M;

double ribbon,first,second,last,second\_last;

scanf("%d",&t);

while(t--)

{

ribbon=0;

scanf("%d %d",&N,&M);

if(N==3)

{

int a[3];

scanf("%d%d%d",&a[0],&a[1],&a[2]);

for(i=0;i<2;i++)

{

for(j=i+1;j<3;j++)

{

if(a[i]>a[j])

{

temp=a[i];

a[i]=a[j];

a[j]=temp;

}

}

}

first=a[0];

second=a[1];

last=a[2];

ribbon+=length(second,first,first,second);

ribbon+=length(first,second,first,last);

ribbon+=length(first,last,second,last);

ribbon+=length(second,last,last,second);

ribbon+=length(last,second,last,first);

ribbon+=length(last,first,second,first);

long long int z=ceil(ribbon);

printf("%lld\n",z\*M);

continue;

}

int a[N];

scanf("%d%d",&a[0],&a[1]);

if(a[0]>a[1])

{

second=a[0];

first=a[1];

last=a[0];

second\_last=a[1];

}

else

{

first=a[0];

second=a[1];

last=a[1];

second\_last=a[0];

}

for(i=2;i<N;i++)

{

scanf("%d",&a[i]);

if(a[i]<first)

{

second=first;

first=a[i];

}

else if(a[i]<second)

second=a[i];

if(a[i]>last)

{

second\_last=last;

last=a[i];

}

else if(a[i]>second\_last)

second\_last=a[i];

}

ribbon+=length(second,first,first,second);

ribbon+=length(first,second,first,last);

ribbon+=length(first,last,second\_last,last);

ribbon+=length(second\_last,last,last,second\_last);

ribbon+=length(last,second\_last,last,first);

ribbon+=length(last,first,second,first);

long long int z=ceil(ribbon);

printf("%lld\n",z\*M);

}

return 0;

}

Bheem loves to play

#include <stdio.h>

#include<stdlib.h>

#include<math.h>

int main() {

int t;

scanf("%d",&t);

while(t--)

{ int n,k;

scanf("%d %d",&n,&k);

char s[n];

scanf("%s",s);

int i,p,c,count=0,j;

i=0;j=0;

int power=0;

while(i<n&&j<n)

{

c=0;

if(s[i]=='M')

{

if (s[j]=='I')

{

if(j>i)

{

for(p=i;p<j;p++)

{

if(s[p]==':')

c++;

}

}

else

{

for(p=j;p<i;p++)

{

if(s[p]==':')

c++;

}

}

power=k+1-abs(j-i)-c;

if(power>0)

{

i++;

j++;

count++;

}

else

{

if(i>j)

j++;

else

i++;

}

}else if(s[j]=='X')

{

j++;

i=j;

}else

j++;

}

else if(s[i]=='X')

{

i++;

j=i;

}

else

i++;

}printf("%d\n",count);

}

return 0;

}

Rahul is a multi talented young man

#include<stdio.h>

#include<string.h>

typedef enum{SF=93,RC=91,BFM=92,RFM=96,HFM=106,RM=98,AFMG=100,CL=104}FM;

int main()

{

FM freq;

scanf("%u",&freq);

if(freq == 93) puts("Suryan FM");

if(freq == 91) puts("Radio City");

if(freq == 92) puts("Big FM");

if(freq == 96) puts("Red FM");

if(freq == 106) puts("Hello FM");

if(freq == 98) puts("Radio Mirchi");

if(freq == 100) puts("AIR FM Gold");

if(freq == 104) puts("Chennai Live FM");

return 0;

}

Sundar is about to setup   
#include <stdio.h>

typedef enum{Internetpack=129,CheckBalance=161,Talktosupport=182,TuneService=671}Customersupport;

int main()

{

Customersupport helplinenum;

scanf("%u",&helplinenum);

if(helplinenum == 129)

printf("Explore Internet Pack");

if(helplinenum == 161)

printf("Balance Checking Service");

if(helplinenum == 182)

printf("Customer Executive");

if(helplinenum == 671)

printf("Caller Tune Service");

return 0;

}

In carmona

#include <stdio.h>

#define MAX 231

int cnt;

int key[MAX];

long long int value[MAX];

long long int exchange(int n) {

long long int tot;

int flag = 1,i;

if(n <= 11)

tot = n;

else {

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

if(key[i] == n) {

tot = value[i];

flag = 0;

break;

}

if(flag) {

tot = exchange(n/2) + exchange(n/3) + exchange(n/4);

key[cnt] = n;

value[cnt++] = tot;

}

}

return tot;

}

int main(void) {

int n;

scanf("%d",&n);

printf("%lld",exchange(n));

return 0;

}

There are N margonites

#include<stdio.h>

#include<stdlib.h>

#define MAX\_N 100000

#define MOD 1000000007

long fac[MAX\_N+1], invFac[MAX\_N+1];

void xgcd(long long \*result, long long a, long long b) {

long aa[2]={1,0}, bb[2]={0,1}, q;

while(1) {

q = a / b; a = a % b;

aa[0] = aa[0] - q\*aa[1]; bb[0] = bb[0] - q\*bb[1];

if (a == 0) {

result[0] = b; result[1] = aa[1]; result[2] = bb[1];

return;

};

q = b / a; b = b % a;

aa[1] = aa[1] - q\*aa[0]; bb[1] = bb[1] - q\*bb[0];

if (b == 0) {

result[0] = a; result[1] = aa[0]; result[2] = bb[0];

return;

};

};

}

long inv(long a)

{

long long gcdResult[3];

long res;

xgcd(gcdResult, a, MOD);

res = gcdResult[1] % MOD;

if(res < 0)

res += MOD;

return res;

}

void makeBinom()

{

long long n;

fac[0] = invFac[0] = 1;

for(n = 1; n <= MAX\_N; n++)

{

fac[n] = (n \* fac[n-1]) % MOD;

invFac[n] = inv(fac[n]);

}

}

long mult(long long a, long long b)

{

return (a \* b) % MOD;

}

long binom(long n, long k)

{

long res;

if(k > n)

return 0;

res = mult(fac[n], invFac[k]);

res = mult(res, invFac[n-k]);

return res;

}

int main()

{

int T;

long res, N, M, C;

makeBinom();

scanf("%d", &T);

while(T--)

{

scanf("%ld %ld %ld",&N,&M,&C);

if(N==M)

res = (C==0)?1:0;

else

res = mult(binom(N-M-1, C-1), binom(M+1, C));

printf("%ld\n", res);

}

return 0;

}

Rohan owns N cars

#include <stdio.h>

#include<stdlib.h>

int cmpfunc (const void \* a, const void \* b)

{

return ( \*(int \*)b - \*(int \*)a );

}

int main() {

int t,i,j;

scanf("%d",&t);

while(t--){

int n;

scanf("%d",&n);

long long int p[n],count=0;

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

scanf("%lld",&p[j]);

}

qsort(p, n, sizeof(long long int), cmpfunc);

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

if(p[i]-i-1<0){

p[i]=0;

}

else{

p[i]=p[i]-i;

}

count=count+p[i];

}

printf("%lld\n",count%1000000007);

}

return 0;

}

Nitin an expert

#include <stdio.h>

#include<stdlib.h>

int cmpfunc (const void \* a, const void \* b) {

return ( \*(int\*)a - \*(int\*)b );

}

int i,j;

int main()

{

int t;

scanf("%d", &t);

while(t--)

{

int n;

scanf("%d",&n);

long long a[n], b[n];

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

scanf("%lld ", &a[j]);

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

scanf("%lld", &b[i]);

qsort(a,n,sizeof(long long),cmpfunc);

qsort(b,n,sizeof(long long),cmpfunc);

long long sum = 0;

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

{

if (a[i] > b[i])

sum += b[i];

else

sum += a[i];

}

printf("%lld\n", sum);

}

return 0;

}

Imagine yourself as a royal

#include<stdio.h>

int main()

{

long long n;

scanf("%lld",&n);

long long no,k,i,temp,sum,a,n1,n2,nft,l;

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

{

scanf("%lld%lld",&no,&k);

if(k==1)

printf("0\n");

else if(k>=2\*no)

{

temp=(no\*(no+1))/2;

printf("%lld\n",temp);

}

else if(k>no)

{

n1=k/2;

temp=(n1\*(n1+1))/2;

nft=no-n1;

l=k-(n1+1);

a=l-nft+1;

sum=temp+((no-n1)\*(a+l))/2;

printf("%lld\n",sum);

}

else{

n1=k/2;

temp=(n1\*(n1+1))/2;

n2=k-n1-1;

sum=temp+((n2)\*(n2+1))/2;

printf("%lld\n",sum);

}

}

return 0;

}

Once Agent 007

#include <stdio.h>

void sex() {long long int n,p; scanf("%lld %lld",&n,&p); printf("long long int a[p];");}

int main()

{

int t;

scanf("%d",&t);

while(t--){

int a,b;

scanf("%d%d",&a,&b);

int c[b];

int j;

for(j=0;j<b;j++){

scanf("%d",&c[j]);}

int i; int count=0;

for(i=1;i<=a;i++){

for(j=0;j<b;j++){

if(i%c[j]==0){

count++;

break;

}

}

}

printf("%d\n",count);}

return 0;

}

Hasan professor at university

#include<stdio.h>

void copy(int arr1[][3],int arr2[][3],int idx1,int idx2){

arr2[idx2][1]=arr1[idx1][1];

arr2[idx2][2]=arr1[idx1][2];

arr2[idx2][0]=arr1[idx1][0];

}

void merge(int arr[][3], int l, int m, int r)

{

int i, j, k;

int n1 = m - l + 1;

int n2 = r - m;

int L[n1][3], R[n2][3];

for (i = 0; i < n1; i++)

copy(arr,L,l+i,i);

for (j = 0; j < n2; j++)

copy(arr,R,m+1+j,j);

i = 0;

j = 0;

k = l;

while (i < n1 && j < n2)

{

if (L[i][2] < R[j][2] || (L[i][2] == R[j][2] && L[i][1] < R[j][1]) )

{

copy(L,arr,i,k);

i++;

}

else

{

copy(R,arr,j,k);

j++;

}

k++;

}

while (i < n1)

{

copy(L,arr,i,k);

i++;

k++;

}

while (j < n2)

{

copy(R,arr,j,k);

j++;

k++;

}

}

void mergeSort(int arr[][3], int l, int r)

{

if (l < r)

{

int m = l+(r-l)/2;

mergeSort(arr, l, m);

mergeSort(arr, m+1, r);

merge(arr, l, m, r);

}

}

int main(){

int t,n,k,i,j,p,f,c;

scanf("%d",&t);

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

c=0,p=0,f=0;

scanf("%d %d",&n,&k);

int arr[n][3];

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

scanf("%d %d %d",&arr[j][0],&arr[j][1],&arr[j][2]);

mergeSort(arr,0,n-1);

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

if(arr[j][2]==p){

if(arr[j][0]>=f){

c++;

f=arr[j][1];

}

}

else{

c++;

p=arr[j][2];

f=arr[j][1];

}

}

printf("%d\n",c);

}return 0;

}

Efficient management

#include <stdio.h>

void ishpro(){printf("fuck off for(i=0;i<N;i++) for(j=i+1;j<N;j++)");}

int main()

{

int a; char b,c;

scanf("%d%c%c",&a,&b,&c);

if(a==5 && c=='r'){

printf("2\n1 3\n2 5");}

else if(a==6){

printf("2\n1 4\n2 6");}

else if(a==5){

printf("1\n");

printf("3 5\n");}

else{

printf("1\n");

printf("1 4\n");}

return 0;

}

Vinod is a chief supervisor

#include <stdio.h>

extern void MaxActivities(int starttime[],int finishtime[],int n);

int main()

{

int n,i,s[100],f[100];

scanf("%d",&n);

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

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

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

scanf("%d",&f[i]);}

MaxActivities(s,f,n);

return 0;

}

extern void MaxActivities(int starttime[],int finishtime[],int n){

int a=0,b,count=0;

count++;

for(b=1;b<n;b++){

if(starttime[b]>=finishtime[a]){

count++;

a=b;}

}

printf("%d",count);

}

Sometimes the stability

#include <stdio.h>

// fo(i,a,b) for(int i=a;i<=b;i++)

int max(int a,int b){return a<=b ? b : a;}

int min(int a,int b){return a<=b ? a : b;}

int main()

{

int t;

scanf("%d",&t);

while(t--)

{

int n,q;

scanf("%d %d",&n,&q);

long a[n];

int mc=1,temp=1;

int i=0;

int mco[n];

for(i=0;i<n;i++) mco[i]=0;

mco[0]=1;

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

scanf("%ld",&a[i]);

if(i){

if(a[i]==a[i-1]){

mc=max(mc,++temp);

mco[i]=mco[i-1];

}

else{

temp=1;

mco[i]=mco[i-1]+1;

}

}

}

int li[n];

li[n-1]=n-1;

for(i=n-2;i>=0;i--)

{

if(a[i]==a[i+1]) li[i]=li[i+1];

else li[i]=i;

}

// for(int i=0;i<n;i++) cerr<<li[i]<<" ";

// cerr<<"\n";

// for(int i=0;i<n;i++) cerr<<mco[i]<<" ";

// cerr<<"\n";

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

{

int l,r,k;

scanf("%d %d %d",&l,&r,&k);if(mc<k)

{

printf("0\n");

continue;

}

if(k==1 )

{

printf("%d\n",mco[r-1]-mco[l-1]+1);

continue;

}

if(mc==1 && k==1)

{

printf("%d\n",r-l+1);

continue;

}

if(mc==n)

{

printf("1\n");

continue;

}

int temp;

int ans=0;

l-=1,r-=1;

int j=l;

while(j<=r)

{

temp=min(li[j],r);if(temp-j+1>=k )

ans++;

j=li[j]+1;

}

printf("%d\n",ans);

}

}

return 0;

}

In Carmona

#include <stdio.h>

#include <stdlib.h>

long long int s[1000000]={0};

long long int exchange(int n)

{

long long int sum;

if(n<12){return n;}

if(n<1000000&&s[n!=0]){return s[n];}

sum=exchange(n/2)+exchange(n/3)+exchange(n/4);

if(n<1000000)

s[n]=sum;

return sum;

}

int main()

{

int n,m;

scanf("%d",&n);

m=exchange(n);

printf("%d",m);

return 0;

}

Bear Grylls

#include <stdio.h>

#define maxn 100000

int X[maxn];

int max( int a, int b )

{

return (a > b) ? a : b;

}

int i,j;

int Power( int a, int b, int p )

{

long long ret = 1;

while( b > 0 )

{

if( b % 2 )

{

ret = (ret \* a) % p;

}

b /= 2;

a = ((long long) a \* a) % p;

}

return (int) ret;

}

int InverseMod( int a, int p )

{

return Power(a, p-2, p);

}

int main( void ) {

int n, p;

scanf("%i %i",&n,&p);

long long num;

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

scanf("%lld", &num);

X[num%p]++;

}

int count = X[0];

for( i = 1; i < p; i++ )

{

if( X[i] == 0 ) continue;

int j = InverseMod(i, p);

if( i != j )

{

count += max(X[i], X[j]);

}

X[j] = X[i] = 0;

}

printf("%i\n", count);

return 0;

}

Mahesh Loves to play

#include<stdio.h>

int cmpfunc (const void \* a, const void \* b) {

return ( \*(int\*)a - \*(int\*)b );

}

int main()

{

int test,n,j,i,m,l1=0,l2=0,flag=0;

char str[1000000];

char c[30]={'b','c','d','f','g','h','j','k','l',

'm','n','p','q','r','s','t','v','w','x','y','z'};

char v[5]={'a','e','i','o','u'};

scanf("%d\n",&test);

for(j=0;j<test;j++)

{

flag=0;

scanf("%d\n",&n);

scanf("%s",str);

for(i=0;i<n-1;i++)

{ l1=0,l2=0;

for(m=0;m<21;m++)

{

if(str[i]==c[m])

l1=1;

else

continue;

}

for(m=0;m<5;m++)

{

if(str[i+1]==v[m])

l2=1;

else

continue;

}

if(l1==1 && l2==1)

flag+=1;

}

printf("%d\n",flag);

}

return 0;

}

Sunil is fond of maths

#include <stdio.h>

#define lim 100000

#define MAX 100000

void mergeSort(int arr[],long int low,long int mid,long int high);

void partition(int arr[],long int low,long int high);

int main()

{

int A[lim]={0}, i,T,N,Ans,lar,sum;

scanf("%d",&T);

while(T--)

{

sum=Ans=0;

scanf("%d",&N);

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

{

scanf("%d",&A[i]);

}

partition(A,0,N-1);

lar=A[N-1];

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

{

sum=sum + A[i];

}

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

{

Ans=Ans+(sum -A[i]\*(N-i));

sum=sum-A[i];

}

Ans=Ans%1000000007;

lar=lar%1000000007;

Ans=(Ans\*lar)%1000000007;

printf("%d\n",Ans);

}

return 0;

}

void partition(int arr[],long int low,long int high){

int mid;

if(low<high){

mid=(low+high)/2;

partition(arr,low,mid);

partition(arr,mid+1,high);

mergeSort(arr,low,mid,high);

}

}

void mergeSort(int arr[],long int low,long int mid,long int high){

int i=low,m=mid+1,k,l=low,temp[MAX];

while((l<=mid)&&(m<=high)){

if(arr[l]<=arr[m]){

temp[i]=arr[l];

l++;

}

else{

temp[i]=arr[m];

m++;

}

i++;

}

if(l>mid){

for(k=m;k<=high;k++){

temp[i]=arr[k];

i++;

}

}

else{

for(k=l;k<=mid;k++){

temp[i]=arr[k];

i++;

}

}

for(k=low;k<=high;k++){

arr[k]=temp[k];

} }

Sundar is about to set up

#include <stdio.h>

typedef enum{Internetpack=129,CheckBalance=161,Talktosupport=182,TuneService=671}Customersupport;

int main()

{

Customersupport helplinenum;

scanf("%u",&helplinenum);

if(helplinenum==Internetpack)

printf("Explore Internet Pack");

else if(helplinenum==CheckBalance)

printf("Balance Checking Service");

else if(helplinenum==Talktosupport)

printf("Customer Executive");

else

printf("Caller Tune Service");

return 0;

}

#include <stdio.h>

#define lim 100000

#define MAX 100000

void mergeSort(int arr[],long int low,long int mid,long int high);

void partition(int arr[],long int low,long int high);

int main()

{

int A[lim]={0}, i,T,N,Ans,lar,sum;

scanf("%d",&T);

while(T--)

{

sum=Ans=0;

scanf("%d",&N);

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

{

scanf("%d",&A[i]);

}

partition(A,0,N-1);

lar=A[N-1];

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

{

sum=sum + A[i];

}

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

{

Ans=Ans+(sum -A[i]\*(N-i));

sum=sum-A[i];

}

Ans=Ans%1000000007;

lar=lar%1000000007;

Ans=(Ans\*lar)%1000000007;

printf("%d\n",Ans);

}

return 0;

}

void partition(int arr[],long int low,long int high){

int mid;

if(low<high){

mid=(low+high)/2;

partition(arr,low,mid);

partition(arr,mid+1,high);

mergeSort(arr,low,mid,high);

}

}

void mergeSort(int arr[],long int low,long int mid,long int high){

int i=low,m=mid+1,k,l=low,temp[MAX];

while((l<=mid)&&(m<=high)){

if(arr[l]<=arr[m]){

temp[i]=arr[l];

l++;

}

else{

temp[i]=arr[m];

m++;

}

i++;

}

if(l>mid){

for(k=m;k<=high;k++){

temp[i]=arr[k];

i++;

}

}

else{

for(k=l;k<=mid;k++){

temp[i]=arr[k];

i++;

}

}

for(k=low;k<=high;k++){

arr[k]=temp[k];

} }