[C - Brush (I)](https://vjudge.net/problem/LightOJ-1015) [LightOJ - 1015](https://vjudge.net/problem/LightOJ-1015/origin)

[E - Lift](https://vjudge.net/problem/LightOJ-1069" \t "_blank) [LightOJ - 1069](https://vjudge.net/problem/LightOJ-1069/origin" \t "_blank)

#include<stdio.h>

int main()

{

int t,n,m,i,j,sum=0;

scanf("%d",&t);

for(j=1;j<=t;j++){

scanf("%d",&m);

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

scanf("%d",&n);

if(n>=0){

sum+=n;

}

}

printf("Case %d: %d\n",j,sum);

}

return 0;

}

**Sample Input**

3

1 2

3 10

5 5

 #include<stdio.h>

int main()

{

int t,n,m,i,j,sum=0;

scanf("%d",&t);

for(j=1;j<=t;j++){

scanf("%d",&m);

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

scanf("%d",&n);

if(n>=0){

sum+=n;

}

}

printf("Case %d: %d\n",j,sum);

}

return 0;

}

**Sample Input**

**Sample Output**

Case 1: 27

Case 2: 59

Case 3: 39

2

3

1 5 10

2

1 99

**Sample Output**

Case 1: 16

## [B - Circle in Square](https://vjudge.net/problem/LightOJ-1022) [LightOJ - 1022](https://vjudge.net/problem/LightOJ-1022/origin)

 #include <stdio.h>

#include <math.h>

#define PI 2\*acos(0.0)

int main()

{

int input,i;

double area,r;

scanf("%d", &input);

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

{

scanf("%lf", &r);

area=((r+r)\*(r+r))-(PI\*r\*r);

printf("Case %d: %.2lf\n",i,area);

}

return 0;

}

**Sample Input**

3

20

30.091

87.0921

Case 2: 100

## [J - Odd Sum](https://vjudge.net/problem/UVA-10783) [UVA - 10783](https://vjudge.net/problem/UVA-10783/origin)

**Sample Input :**

2

1

5

3

5

**Sample Output:** Case 1: 9

Case 2: 8

## #include<stdio.h>

## int main()

## {

## int n,j;

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

## for(j=1;j<=n;j++)

## {

## int a,b,i,sum=0;

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

## if(a<b){

## for(i=a;i<=b;i++){

## if(i%2!=0){

## sum+=i;

**Sample Output**

Case 1: 343.36

Case 2: 777.26

Case 3: 6511.05

## }

## }

## printf("Case %d: %d\n",j,sum);

## }

## }

## return 0;

## }

## [A - Fibsieve`s Fantabulous Birthday](https://vjudge.net/problem/LightOJ-1008)

[D - How Cow](https://vjudge.net/problem/LightOJ-1107) [LightOJ - 1107](https://vjudge.net/problem/LightOJ-1107/origin)

#include<stdio.h>

int main()

{

int testcase,testcase1;

scanf("%d",&testcase);

int i,j;

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

int in1,in2,in3,in4,out1,out2;

printf("Case %d:\n",i+1);

scanf("%d%d%d%d",&in1,&in2,&in3,&in4);

scanf("%d",&testcase1);

for(j=0;j<testcase1;j++){

scanf("%d%d",&out1,&out2);

if((out1>=in1&&out1<=in3)&&(out2>=in2&&out2<=in4)){

printf("Yes\n");

}

else

printf("No\n");

}

}

return 0;

}

**Sample Input**

1

1 2 8 10

7

0 0

5 6

1 0

7 9

3 5

10 10

1 11

## [LightOJ - 1008](https://vjudge.net/problem/LightOJ-1008/origin" \t "_blank)

## #include<stdio.h>

## #include<math.h>

## int main()

## {

## long long int testcase,row,col,input,i,root,diff;

## scanf("%lld",&testcase);

## for(i=1;i<testcase;i++){

## scanf("%lld",&input);

## root = sqrt(input);

## diff = input - root\*root;

## if(diff==0){

## if(root%2==0){

## row = 1;

## col = root;

## }

## else

## {

## col = 1;

## row = root;

## }

## }

## else if(diff>root)

## {

## if(root%2==0){

## row=root+1;

**Sample Output**

Case 1:

No

Yes

No

Yes

Yes

No

No

## col=root+1 - (diff-root-1);

## }

## else {

## row=root+1 - (diff-root-1);

## col=root+1;

## }

## }

## else{

## if(root%2==0){

## row=input-root\*root;

## col=root+1;

## }

## else{

## row=root+1;

## col=input-root\*root;

**Sample Output**

Case 1: 2 3

Case 2: 5 4

Case 3: 1 5

## }

**Sample Input**

3

8

20

25

## }

## printf ("Case %lld: %lld %lld\n", i, col, row);

## }

## return 0;

## }

## [F - Juice in the Glass](https://vjudge.net/problem/LightOJ-1216) [LightOJ - 1216](https://vjudge.net/problem/LightOJ-1216/origin)

[G - Area of a Parallelogram](https://vjudge.net/problem/LightOJ-1305) [LightOJ - 1305](https://vjudge.net/problem/LightOJ-1305/origin)

#include<stdio.h>

int main()

{

int a,ax,ay,bx,by,cx,cy,dx,dy,area,i,q;

scanf("%d",&a);

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

scanf("%d%d%d%d%d%d",&ax,&ay,&bx,&by,&cx,&cy);

dx=cx+ax-bx;

dy=cy+ay-by;

q=((ax\*by)+(bx\*cy)+(cx\*dy)+(dx\*ay))-

((ay\*bx)+(by\*cx)+(cy\*dx)+(dy\*ax));

if(q<0)

q\*=-1;

area=0.5\*q;

printf("Case %d: %d %d %d\n",i+1,dx,dy,area);

}

}

**Sample Input**

3

0 0 10 0 10 10

0 0 10 0 10 -20

-12 -10 21 21 1 40

## #include <stdio.h>

## #include <math.h>

## #define PI acos(-1)

## int main()

## {

## int test,i,r1,r2,height,pjuice;

## double R,R2,Volume;

## scanf("%d",&test);

## for(i =0; i<test; i++) {

## scanf("%d%d%d%d",&r1,&r2,&height,&pjuice);

## R = r2+ (r1-r2)\*((double)(pjuice)/height);

## Volume = ((PI\*pjuice)\*(R\*R+R\*r2+r2\*r2))/3.0;

## printf("Case %d: %.9lf\n",i+1,Volume);

## }

## return 0;

**Sample Output**

Case 1: 0 10 100

Case 2: 0 -20 200

Case 3: -32 9 1247

## }

**Sample Output**

Case 1: 58.643062867

Case 2: 122.52211349

**Sample Input**

2

5 2 3 2

5 2 3 3

## I - The Coco-Cola Store [UVA - 11877](https://vjudge.net/problem/UVA-11877/origin)

## #include<stdio.h>

## int main()

## {

## int n, get;

## while(scanf("%d",&n)==1)

## {

**Sample Input:**

3

10

81

0

**Sample Output:**

1

5

40

## if(n==0)

## break;

## get=0;

## while(n>=3)

## {

## n=(n-3)+1;

## get+=1;

## }

## if(n==2)

## get+=1;

## printf("%d\n",get);

## }

## return 0;

## }