A - Small, Large, or Equal

```
#include <bits/stdc++.h>
using namespace std;


int main()
{
   int  num1,num2;
   cin>>num1>>num2;
   if(num1<num2)
   {
       cout<<"a < b";
   }
   if(num1>num2)
   {
       cout<<"a > b";
   }
   if(num1==num2)
   {
       cout<<"a == b";
   }
}
```

Sample Input 1

```
1 2
```

Sample Output 1

```
a < b
```

Sample Input 2

```
4 3
```

Sample Output 2

```
a > b
```

Sample Input 3

```
5 5
```

Sample Output 3

```
a == b
```

B - Compute area of rectangle

```
#include <bits/stdc++.h>
using namespace std;

int main()
{
   int l,b;
   cin>>l>>b;
   int area=l*b;
   cout<<area;
}
```

5 8

40

C - Triangle validator

```
#include <bits/stdc++.h>
using namespace std;
```

```
int main()
{
   int a,b,c;
   cin>>a>>b>>c;
   if((a+b)>c && (b+c)>a && (a+c)>b)
   {
       cout<<"Yes";
   }
   else
   {
       cout<<"No";
   }
}
```

4 3 5

Yes

D - Divide the apples - 2

```
#include <bits/stdc++.h>
using namespace std;

int main()
{
   int n,k;
   cin>>n>>k;
   cout<<k%n;
}
```

3 14

2

E - Watermelon

```
#include <bits/stdc++.h>
using namespace std;

int main()
{
  int w;
  cin>>w;
  if(w%2==0&& w!=2)
  {
     cout<<"Yes";
  }
  else
  {
     cout<<"No";
  }
}
```

8

Yes

F - Fever

```
#include <bits/stdc++.h>
using namespace std;

int main()
{
  int t;
```

```
  cin>>t;
  while(t--)
  {
      int num;
      cin>>num;
      if(num>98)
      {
          cout<<"YES"<<"\n";
      }
      else
      {
          cout<<"NO"<<"\n";
      }
  }
}
3
98
100
96
```

```
//NO
YES
NO
```

G - Lunchtime

```
#include <bits/stdc++.h>
using namespace std;

int main()
{
```

```
  int t;
  cin>>t;
  while(t--)
  {
      int num;
      cin>>num;
      if(num==1 || num==2 ||num==3 ||num==4)
      {
          cout<<"YES"<<"\n";
      }
      else
      {
          cout<<"NO"<<"\n";
      }
  }
}
3
1
7
3
```

```
YES
NO
YES
```

H - Is it hot or cold

```
 #include <bits/stdc++.h>
using namespace std;
```

```
int main()
{
  int t;
  cin>>t;
  while(t--)
  {
     int num;
     cin>>num;
     if(num>20)
     {
        cout<<"HOT"<<"\n";
     }
     else
     {
        cout<<"COLD"<<"\n";
     }
  }
}
```

2

21

16

```
//HOT
COLD
```

I - Discount

```
#include <bits/stdc++.h>
using namespace std;
```

```
int main()
{
  int t;
  cin>>t;
  while(t--)
  {
     int num;
     cin>>num;
     cout<<100-num<<"\n";
  }
}
```

4

5

9

11

21

//

```
95
91
89
79
```

J - TV Discount

Test case 11: The cost of the first TV after discount is 85−35=5085−35=50, while the cost of the second TV after discount is 75−20=5575−20=55. Thus the first TV is cheaper to buy than the second.

```
#include <bits/stdc++.h>
using namespace std;


int main()
```

```
{
  int t;
  cin>>t;
  while(t--)
  {
     int tv1,tv2,dis1,dis2;
     cin>>tv1>>tv2>>dis1>>dis2;
     int afterdiscount1=tv1-dis1;
     int afterdiscount2=tv2-dis2;
     if(afterdiscount1<afterdiscount2)
     {
        cout<<"First"<<"\n";
     }
     if(afterdiscount1>afterdiscount2)
     {
        cout<<"Second"<<"\n";
     }
     if(afterdiscount1==afterdiscount2)
     {
        cout<<"any"<<"\n";
     }
  }
}
3
85 75 35 20
100 99 0 0
30 40 0 10
```

```
//First
Second
any
```

K - Battery Low

```
#include <bits/stdc++.h>
using namespace std;


int main()
{
  int t;
  cin>>t;
  while(t--)
  {
      int battery;
      cin>>battery;
      if(battery<=15)
      {
          cout<<"Yes"<<"\n";
      }
      else
      {
          cout<<"No"<<"\n";
      }
  }
}
```

3

15

3

65

```
//Yes
Yes
```

```
No
```

L - Chef and Candies

```
#include <bits/stdc++.h>
using namespace std;


int main()
{
  int t;
  cin>>t;
  while(t--)
  {
      int N,X;
      cin>>N>>X;
        N=max(0, N - X);
      int rem =N % 4 ? 1 : 0;
      cout<< (N / 4) + rem << "\n";


  }
}
```

```
4
20 12
10 100
10 9
20 9
```

```
//2
0
1
```

3

M - Minimum Pizzas

```
#include <bits/stdc++.h>
using namespace std;


int main()
{
  int t;
  cin>>t;
  while(t--)
  {
      int N,X;
      cin>>N>>X;
      int pizza=N*X;
      int reqpizza=pizza/4;
      if(pizza%4==0)
      {
         cout<<reqpizza<<"\n";
      }
      else
      {
          cout<<reqpizza+1<<"\n";
      }
  }
}
//4
1 5
```

2 6

4 3

3 5

```
//2
3
3
4
```

N - Sugarcane Juice Business

```
#include <bits/stdc++.h>
using namespace std;

int main()
{
  int t;
  cin>>t;
  while(t--)
  {
     int n;
     cin>>n;
     cout<<n*15<<"\n";
  }
}
```

4

2

4

5

```
//30
60
```

```
75
150
```

O - Perimeter of rectangle

```
#include <bits/stdc++.h>
using namespace std;

int main()
{
    int l,b;
    cin>>l>>b;
    int a=l+b;
    int perimeter=2*a;
    cout<<perimeter;

}
3 4
//14
```

P - Next even integer

```
#include <bits/stdc++.h>
using namespace std;

int main()
{
    int num;
    cin>>num;
    if(num%2==0)
```

```
    {
        cout<<num+2;
    }
    else
    {
        cout<<num+1;
    }
}
```

7 8

4 6

Q - Decomposition of three digit number

```
#include <bits/stdc++.h>
using namespace std;

int main()
{
    int num;
    cin>>num;
    num=abs(num);
    int d1,d2,d3;
    //193
    //193/100=1
    //193/10)%10=9
    //193%10
    d1=num/100;
    d2=(num/10)%10;
    d3=(num%10);
```

```
    cout<<d1<<"\n"<<d2<<"\n"<<d3<<"\n";
}
```

-232

//

2

3

2

R - The first digit of the number

```
#include <bits/stdc++.h>
using namespace std;

int main()
{
    long int num,l,f;
   cin>>num;
   num=abs(num);
   l=(int)log10(num)+1;
   f=num/pow(10,l- 1) ;
   cout<<f;
}
```

1234567890123

//1

S - Two digits from four digits

```
#include <bits/stdc++.h>
using namespace std;

int main()
```

```
{
  int num,l,m;
  cin>>num;
  if(num>0)
{
 l=num/10;//4765/10=400
 m=l%100;//400%100=4
 cout<<m;
 }
}
4765
//76
```

T - Rectangle

```
 #include <bits/stdc++.h>
using namespace std;

int main()
{
  int l,b;
  cin>>l>>b;
  int area=l*b;
  int perimeter=(2*(l+b));
  cout<<area<<" "<<perimeter;
}
3 5
// 15 16
```

U - Watch

```
#include <cstdio>
#include <iostream>
using namespace std;
int main ()
{
   long int sec;
   cin >>sec;
   cout << sec / 3600 << ":" ;
   sec=sec % 3600;
   cout<<sec/60<<":" << sec % 60<<endl;
   return 0;
}
46979
```

```
//13:2:59
```

V - Range

```
#include <bits/stdc++.h>
using namespace std;
int main ()
{
   int n1,n2,n3;
   cin>>n1;
   cin>>n2;
   cin>>n3;
   if(n1<n2 && n2<n3 && n1<n3)
   {
      cout<<"Yes"<<endl;
   }
```

```
    else
    {
        cout<<"No"<<endl;
    }

    return 0;
    }
```

1 3 7 // Yes

W - Sorting Three Numbers

```
#include <iostream>
using namespace std;
int main ()
{
    int n1,n2,n3;
    cin>>n1;
    cin>>n2;
    cin>>n3;
    if(n1 > n2)
    {
        swap(n1, n2);
    }
    if(n1 > n3)
    {
        swap(n1, n3);
    }
    if(n2 > n3)
    {
        swap(n2, n3);
```

```
    }
    cout<<n1 <<" " << n2<< " " << n3 <<endl;
    return 0;
    }
```

```
3 8 1
```

//1 3 8

Y - Print Test Cases

```
#include<iostream>
using namespace std;
int main() {
    int x, cn = 1;
    cin >> x;
    while (x != 0) {
        cout << "Case " << cn << ": " << x << endl;
        cn++;
        cin >> x;
    }
    return 0;
}
```

Sample Input

```
3
5
11
7
8
19
0
```

Sample Output

```
Case 1: 3
Case 2: 5
Case 3: 11
```

```
Case 4: 7
Case 5: 8
Case 6: 19
```

Z - Swapping Two Numbers

```
#include<bits/stdc++.h>

using namespace std;

int main()

{

int x,y;

while(true)

{

cin>>x>>y;

if(x==0&&y==0)

break;

if(x<y)

cout<<x<<" "<<y<<endl;

else

cout<<y<<" "<<x<<endl;

}

return 0;

}
```

Sample Input

```
3 2
2 2
5 3
0 0
```

Sample Output

```
2 3
2 2
3 5
```