

Problems in class

1. You are given 3 integer angles(in degrees) **A**, **B** and **C** of a triangle. You have to tell whether the triangle is valid or not.

A triangle is valid if sum of its angles equals to 180.

NOTE: You have to take the **input** of 3 sides of triangle from the user.

```
A = int(input())
B = int(input())
C = int(input())
if A+B+C == 180:
    print ("1")
else:
    print("0")
```

2. Write a program to input two numbers(**A & B**) from user and print the maximum element among A & B.

Problem Constraints

$1 \leq A \leq 1000000$

$1 \leq B \leq 1000000$

```
A = int(input())
B = int(input())
if 1 <= A <= 1000000 and 1 <= B <= 1000000:
    print(max(A,B))
```

3. You are given the Cost Price **C** and Selling Price **S** of a Product. You have to tell whether there is a Profit or Loss. Also, calculate total profit or loss.

NOTE: It is guaranteed that Cost Price and Selling Price are not equal.

NOTE: You have to take input of the **Cost Price(C)** and **Selling Price(S)** from the user.

Problem Constraints

C ≠ S

1 ≤ C, S ≤ 109

```
C = int(input())
S = int(input())
Profit = S-C
if 1<=C and S<= 10**9 and C != S and Profit > 1:
    print(1)
    print(S-C)
else:
    print(-1)
    print(-(S-C))
```

4. Given the number **N**, Categorise the number according to following condition :1. Odd-Positive2. Odd-Negative3. Even-Positive4. Even-Negative**Note** : Intention of problem is to teach you **Nested If-Else**, so try to solve this problem using nested if-else

Problem Constraints

- **10000 ≤ N ≤ 10000 except 0**

```
N = int(input())
if -10000 <= N <= 10000 and N !=0:
    if N < 0 and N%2 == 0:
        print("Even-Negative")
    elif N > 0 and N % 2 == 0:
        print("Even-Positive")
    elif N < 0 and N % 2 != 0:
        print("Odd-Negative")
```

```
else:  
    print("Odd-Positive")
```