Write a program in Python for the following using selection and iteration constructs:

1. To check whether a given year is leap year or not.

Rules:

1. If year is divisible by 400 then Print (Year, ‘is a leap year’)
2. Else if year is divisible by 100 Print (Year, ‘is not a leap year’)
3. Else if year is divisible by 4 Print (Year, ‘is a leap year’)
4. Else Print (Year, ‘is not a leap year’)
5. Check whether a given date is valid or not.
6. Given the sides a triangle, check whether triangle is equilateral, scalene or isosceles or not

Rules:

1. Isosceles triangle: A triangle that has two sides of equal length.
2. Equilateral triangle: A triangle in which all three sides are equal.
3. Scalene triangle: A triangle that has three unequal sides.
4. Given the three angles, check whether it forms a triangle or not.

Rule: None of angles should be zero and the sum of the angles should be 180.

1. A Tribonacci sequence is defined as: tn = tn-1+tn-2+tn-3 if n>3 and t1=0, t2=1, t3=2.Print the first ‘n’ terms of the sequence.
2. Get input of n integers from the user one by one and print the number of positive, negative and zeros. Also find the sum and average of all positive and negative numbers separately.
3. Write a program to input marks in English, Maths and Science of 10 students who have passed CBSE Examination 2020. Now perform the following tasks:  
   a) Print the number of students who have secured 95% or more in all the subjects.  
   b) For each subject, print the number of students who have secured 90% or more.
4. Write a program to accept a number from the user and check whether it is a palindrome or a perfect number.  
   a) A number is palindrome which when read in reverse order is same as in the right order.  
   b) A number is perfect if it is equal to the sum of its factors other than the number itself.