Problem Set 1

Problem 1

Write a Simple Java program to check whether a year is a leap year or not

Prompt: Enter the year

Input: 2020

Output: Yes, this is leap year

Technique: If a year is divisible by 4 and not divisible by 100, it is a leap year. Again, if a year is divisible by 400 it is a leap year.

Problem 2

Three sides of a triangle are given, we are to check whether the triangle is:

- An **Equilateral** triangle(All the sides are same)
- An **Isosceles** triangle(Any two sides are same)
- A **Scalene** triangle(All the sides are different)

  Input: 1 2 3

  Output: The triangle is Scalene in nature

Problem 3

The problem is taken from www.codingbat.com

We are having a party with amounts of tea and candy. Return the outcome of the party encoded as 0=bad, 1=good, or 2=great. A party is good (1) if both tea and candy are at least 5. However, if either tea or candy is at least double the amount of the other one, the party is great (2). However, in all cases, if either tea or candy is less than 5, the party is always bad (0)

Input: 6 8

Output: The party is good(1)

Input: 3 8

Output: The party is bad(0)

Input: 13 6

Output: The party is great(2)