HOMEWORK-1

It takes about 365.2422 days for the Earth to make one revolution in its orbit around the Sun. With the Gregorian calendar we are using now, a year is 365 days and every 4 years, February is 29 and it is completed to 366 days.

Figure 1: Julius Caesar

It was approved by Julius Caesar under Julian 46 years BC. this day was a reformation to the ancient Roman calendar and a year was 365.25 days. Having 365.25 days instead of 365.2422 in a year is about making 128 one, one-day error requests to it. Although these numbers do not appear to be many, in the 16th century, Julian changed from gold to the Gregorian day, the error of 12 days accumulated. [1]

Figure 2: Pope Gregory

The Gregorian calendar was introduced in 1582 by Gregory the 13th as a reformation of the Julian calendar. In this calendar, a leap day is added every 4 years. But if that year is divisible by 100 but not by 400, that year is not considered a leap year.

For example, the years 1700, 1800, 1900, 2100, 2200, 2300, 2500 are not leap years.

This calculation reduced the margin of error from one in 128 years to one in 3300 years, and a year is 365.2425 days. The current Gregorian calendar is 13 days ahead of the Julian calendar.

With March 14, 2100 (February 29, 2100 Julian), the difference will increase to 14 days. [2]

Application of homework:

Python 3.7 will be used in this assignment. It will be printed on the screen whether the year given to you as input is a leap year or not.