

Introduction to Computers and Programming

Lab 4 (Week 5)

Due date: 2020/10/15 (Thu.) 23:55

1. Write a program in C to find whether a given year is a leap year or not by calling the function `leap_year_judge`. The function `leap_year_judge` will find whether a given year is a leap year or not and return the judgement.

Hint: A leap year is exactly divisible by 4 except for century years (years ending with 00). The century year is a leap year only if it is perfectly divisible by 400.

Sample Output:

```
Input a year :2016
2016 is a leap year.
```

```
Input a year :2015
2015 is not a leap year.
```

2. Here is a **function** that calculates the value of the following polynomial

$$\sum_{i=1}^n Xi^2 = X_1^2 + X_2^2 + X_3^2 + \dots + X_n^2 .$$

Write a program that contains the function. The user can input a sequence of numbers and obtain the answer of the above function. That is, the parameter of the function must be an array.

Sample Output :

```
Enter a row:1 1.1 2 3
15.21
```