

# Lab Work 1

## Write a program by using Python

The program has certain functions:

1. The user can verify whether a year is a leap year or not.
2. The user can enter a time and time zone to get the corresponding Greenwich time (GMT +0).

### Hints

- For definition of time zone and Greenwich time you can refer to:  
<https://www.timeanddate.com/time/zones/gmt>
- In the Gregorian calendar, three criteria must be taken into account to identify leap years:

**The year must be evenly divisible by 4;**

If the year can also be evenly divided by 100, **it is *not* a leap year;**

unless...

The year is also evenly divisible by 400. **Then it *is* a leap year.**

### Marking Criteria

- |   |    |
|---|----|
| 1. Code can be executed without any error | 2% |
| 2. Leap year function is correct          | 2% |
| 3. Timezone function is correct           | 2% |
| 4. Include loops and selections           | 2% |
| 5. Sufficient comments and indentations   | 1% |
| 6. Efficient logic                        | 1% |