# 02.1 - Leap Year

The month of February normally has 28 days, but if it is a leap year, February has 29 days. Write a Python program that asks the user to enter a year. The program should then display the number of days in February that year. Use the following criteria to identify leap years:

- Determine whether the year is divisible by 100. If it is, then it is a leap year if and only if it is also divisible by 400. For example, 2000 is a leap year, but 2100 is not.
- If the year is not divisible by 100, then it is a leap year if and only if it is divisible by 4. For example, 2004 is a leap year, but 2006 is not.

Test your program with the following data:

| Input | Output |
|---|---|
| year | days |
| 1900 | 28 |
| 2000 | 29 |
| 2020 | 29 |
| 2022 | 28 |

Finally, format your program to match the sample below. Your output should exactly match the sample output, character for character, including all white space and punctuation. User input in the sample has been highlighted in Pappy's Purple to distinguish it from the program's output, but your user input does not need to be colored. Save your finished program as `leap_year_login.py`, where `login` is your Purdue login. Then submit it along with a screenshot showing a run of **all 4** test cases.

Terminal

```
$ python leap_year_login.py
Enter a year: 2020
The year 2020 is a leap year.
February of 2020 has 29 days.
$ python leap_year_login.py
Enter a year: 2022
The year 2022 is not a leap year.
February of 2022 has 28 days.
```