Programming Exam 2

Date/Time: 2023.03.21 08:10 – 09:00
(程式檔命名學號_quiz2.py，上傳至 Moodle PE2 上傳區)

Problem: Checking and Formatting Leap Year

Sample Input/Output
(以下是你程式執行後須印出的結果)

In this task, you are asked to write a Python program that determines whether a year given by the user is a **leap year** or not, and also prints the year in a particular format.

You will ask the user to input a year and then **use conditional statements to check whether it is a leap year or not.** A year is considered a leap year if it is divisible by 4, but if it is also divisible by 100, it is not a leap year unless it is also divisible by 400. Your program should output a message indicating whether the year is a leap year or not.

Additionally, you will format the year as a string with either "BC" or "AD" suffix depending on whether it is a positive or negative number. If the year is negative, you will add "BC" to the end of the year as a string, otherwise, you will add "AD".

For example, if the user inputs 2000, the program should output "It's a leap year!" and "2000 AD" on separate lines. If the user inputs -100, the program should output "It's not a leap year." and "100 BC" on separate lines.

```
c:\workspace>python pe2.py
Please enter a year: 2000
It's a leap year!
2000 AD

c:\workspace>python pe2.py
Please enter a year: -7
It's not a leap year.
7 BC

c:\workspace>python pe2.py
Please enter a year: -600
It's not a leap year.
600 BC

c:\workspace>python pe2.py
Please enter a year: 99999992
It's a leap year!
99999992 AD

c:\workspace>
```

(繳交是交 pe2.py 檔，不是交截圖)

Note: You need to write comments (註解) for each part in your code.