Plan for leap year calculator:

**Inputs:** a year (string, convert to int)

**Outputs**: number of days in February

“The year [year var] had [days in Feb] days in February.”

**Steps/logic:**

* + The year is divisible by 4 (year % 4 == 0);
  + If the year can be evenly divided by 100 (year % 100 == 0), it is NOT a leap year, **unless**;
  + The year is also evenly divisible by 400. Then it is a leap year.

**Divisible by 4 and divisible by 100: not a leap year**

**Divisible by 400 (and divisible by 4 and by 100): a leap year**

**Divisible by 4 and not divisible by 100: a leap year**

**Not divisible by 4 at all: not a leap year**

**Year <= 0 : invalid**

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**if year <= 0:**

**print(nope, bad)**

**elif year % 4 == 0: # divisible by 4**

**if year % 100 == 0: # divisible by 4 and 100**

**if year % 400 == 0: # divisible by 4 and 100 and 400**

**yes a leap year**

**else: # divisible by 4 and 100 and NOT 400**

**not a leap year**

**else: # not divisible by 4**

**not a leap year**

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1. Greet the user
2. Ask them for a year
3. Convert the year to int
4. Do the logic
   1. **if year > 0:**
   2. **(if year % 4 == 0 and year % 400 == 0:**
   3. **is a leap year**
   4. **elif year % 4 == 0 and year % 100 == 0:**
   5. **is NOT a leap year**
   6. **elif year % 4 == 0 and year % 100 != 0:**
   7. **is a leap year**
   8. **else:**
   9. **not a leap year)**
   10. **else:**
   11. **(what are you even doing?)**
5. Print out the number of days IF THE YEAR WAS VALID