

IF-statements

Here are several versions of the if-statement:

```
if <condition>:  
    <body>
```

```
if <condition>:  
    <body 1>
```

```
else:  
    <body 2>
```

```
if <condition 1>:  
    <body 1>  
elif <condition 2>:  
    <body 2>  
elif <condition 3>:  
    <body 3>  
  
...  
else  
    <final body>
```

Write a program that inputs a number x . If x is negative the program should say so. If x is not negative and has 1 digit the program should say it is "small"; if it has 2 digits the program should say it is "medium-sized"; if it has 3 or more digits the program should say it is "big".

Write a program that inputs a year and says if it is a leap year

Here is the leap year algorithm for the Gregorian Calendar that many countries use, according to www.timeanddate.com:

The rule for calculating Leap Years was changed to include that a year is a Leap Year if:

- The year is evenly divisible by 4;

- If the year can 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.

Thank you, Pope Gregory XII

Clicker Question

How do we start determining if *year* is a leap year?

- A. if `year%4 == 0`:
- B. if `year%400 == 0`:
- C. if `year%4 != 0`:
- D. if `isaLeapYear(year)`: