Problem Set 2 - Conditionals

p1: timeModule.py
The time module provides a function, also named time, that returns the current Greenwich Mean Time in 'the epoch', which is an arbitrary time used as a reference point. On UNIX systems, the epoch is 1 January 1970.

```
>>> import time
>>> time.time()
1576332326.813035
```

Write a script that reads the current time and converts it to a time of day in hours, minutes, and seconds, plus the number of days since the epoch.

p2: fermat.py
Fermat's Last Theorem says that there are no positive integers a, b, and c such that

\[ a^n + b^n = c^n \]

for any values of n greater than 2.

Write a function named check_fermat() that takes four parameters - a, b, c, and n - and checks to see if Fermat’s theorem holds. If n is greater than 2 and

\[ a^n + b^n = c^n \]

the program should print, "Holy smokes, Fermat was wrong!". Otherwise the program should print,"No, that doesn't work."

p3: fermatInput.py
Write a function that prompts the user to input values for a, b, c and n, converts them to integers, and uses check_fermat() to check whether they violate Fermat’s theorem.
p4: isTriangle.py

If you are given three sticks, you may or may not be able to arrange them in a triangle. For example, if one of the sticks is 12 inches long and the other two are 1 inch long, you will not be able to get the short sticks to meet in the middle. For any three lengths, there is a simple test to see if it is possible to form a triangle.

If any of the three lengths is greater than the sum of the other two, then you cannot form a triangle. Otherwise, you can. (If the sum of two lengths equals the third, they form what is called a 'degenerate' triangle.)

1. Write a function named is_triangle() that takes three integers as arguments, and that prints either 'Yes' or 'No', depending on whether you can or cannot form a triangle from sticks with the given lengths.
2. Write a function that prompts the user to input three stick lengths, converts them to integers, and uses is_triangle() to check whether sticks with the given lengths can form a triangle.