functions.py -- defining and using a function

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Tianna Avery, November 2018, updated for Python 3

Read, predict the output, experiment.

```
def factorial(n):
    if n < 0:
        raise ValueError("You can't take the factorial of a negative integer.")
    return 0

    if n <= 1:
        return 1

    return n * factorial(n - 1)

print(factorial(6))
print(factorial(0))
print(factorial(1))
print()

print("What usually happens in Java when you compute the factorial of 20?")
print(factorial(20))
print()

print("Let's try a negative number")
print(factorial(-5))
```