

1. Copy the `countdown` function from Section 5.8 of your textbook.

```
def countdown(n):
    if n <= 0:
        print('Blastoff!')
    else:
        print(n)
        countdown(n-1)
```

Write a new recursive function `countup` that expects a negative argument and counts “up” from that number. Output from running the function should look something like this:

```
>>> countup(-3)
-3
-2
-1
Blastoff!
```

Write a Python program that gets a number using **keyboard input**. (Remember to use `input` for Python 3 but `raw_input` for Python 2.)

If the number is positive, the program should call `countdown`. If the number is negative, the program should call `countup`. Choose for yourself which function to call (`countdown` or `countup`) for input of zero.

Provide the following.

- The code of your program.
- Output for the following input: a positive number, a negative number, and zero.
- An explanation of your choice for what to call for input of zero.

2. Write your own unique Python program that has a **runtime error**. Do not copy the program from your textbook or the Internet. Provide the following.

- The code of your program.
- Output demonstrating the runtime error, including the error message.
- An explanation of the error message.
- An explanation of how to fix the error.