This homework is a little different because we have multiple files, so refer to this instructions page and follow along.

In the first two problems we’ll be working with custom modules/exceptions and in the last problem we’ll be working with reading/writing files and try-except.

**PROBLEM 1:**

* First, go to the **errors.py** file
* Here, I want you to create 2 custom exceptions (classes that inherit from Exception)
  + 1: **NegativeBalanceError** - will be raised if we try to take too much money out
  + 2: **NegativeInputError** - will be raised if we try to deposit/withdraw negative money
* Hint: for custom exceptions we basically do a class definition inheriting from Exception with nothing inside except "pass"

**PROBLEM 2:**

* Next, go to **bankaccount.py**
* At the top of the file, import our errors module
* Create a **BankAccount class** that has the following variables: owner, bank name, balance
  + hint: we need \_\_init\_\_ that will take in the arguments self and then the 3 custom variables
* We also want the following methods:
  + **print\_balance**: just prints out the current balance
    - (even though it takes no input, we always need it take in the self variable)
  + **deposit**: takes in a number to deposit to the account
    - it will update the balance by adding this number to it
    - if we give it a negative number, it'll raise a NegativeInputError
    - Hint: we need raise and then errors.<ErrorName>
  + **withdraw**: takes in a number to withdraw from the account
    - it will subtract the input number from the current balance
    - If the input number > current balance, it will raise a NegativeBalanceError
    - if we give it a negative number, it'll also raise a NegativeInputError

**PROBLEM 3:**

* Lastly, open up the **files.py**
* Here, I want you to play around with try-except and reading/writing to files
* I defined a function called **file\_error** that takes in the name of a file as input (remember: file names are strings! so it takes a string as input)
* I want you to write the body of the function and it will do the following:
  + 1) Read in the file line by line (stores each line as a string in a list)
  + hint: we want to create a variable this list of lines
  + 2) It will then try to (try case) print "this is the fifth line" followed by printing out the 5th line in the file (so the 5th string in this list)
  + 3) If we encounter an error (except case), it will print "there is no fifth line in this file"
  + 4) Regardless of if there is an error or not (finally case), we'll write the first line (first element in our list from before) to a file called “firstline.txt” and return the string "open up firstline.txt”

hint: create a variable to store the string representing the file's content

* You can test your code by running file\_error("test\_file.txt") in the shell