CS414: Lab #1

First, create a folder on your computer, and call it 'lab1'.

Then, go to the course website: cs.unh.edu/~cs414, and download the starting files **`hello_you.py`**, **`to_fahrenheit.py`**, and **`is_palindrome.py`** . Right-click or Control-click on each file, find your 'lab1' folder, and save it there.

Finally, run IDLE, and open each of the files, and do the following exercises:

1. Here is a program that writes **`Hello, world!`**.

```
# My first program!
print 'Hello, world!'
```

Write another program which asks the user for a name, and greets the user. For example, if the user types **`Donald`**, the program writes

```
Hello, Donald!
```

You will have to use **`raw_input()`** to get the string from the user. You will also have to use **`+`** (the plus sign) to join various strings into the desired output string.

2. Here is a program that gets a number from the user: a temperature in Farenheit. It prints the temperature in Celsius.

```
fahrenheit = float(raw_input('Temp in Fahrenheit? '))
celsius = (fahrenheit - 32) * 9 / 5
print fahrenheit, 'degrees F =', celsius, 'degrees C'
```

Write another program which does the reverse. The formula you need is: *fahrenheit = celsius * 9 / 5 + 32.*

3. Write a program that gets a four-letter string from the user, and prints **`True`** or **`False`**, depending on whether that string is *palindromic* or is not (a palindrome is the same forward and backwards).

For example: **`ABBA`** would print **`True`**, but **`DBBA`** and **`ABba`** would print **`False`** (BTW, upper and lower-case letters are considered different).

If the string is called **`word`**, you will have to use **`word[0]`** to access the first letter, and **`word[-1]`** to get the last letter. Similarly, **`word[1]`** is the second letter, and **`word[-2]`** is the second-to last. A four-letter word is palindromic if the first letter equals the last one, and the second equals the second-to-last one. Use == to test if letters are the same. Use **`and`** to combine your tests.

Turning in your work:

To complete the lab, go to **`mycourses.unh.edu`**, find cs414, and find lab 1. Then click the 'Submit' button, and upload **all three files**. Submit your work before the end of the lab session, even if you are not finished. You have until midnight to submit the work again, without late penalty.