



Reno Technology Academy

Multnomah University Reno/Tahoe

CIS104: Coding in Python

Lesson 2

Readings:

Learning Python

Chapter 6: The Dynamic Typing Interlude pp. 181-193

Chapter 10: Introducing Python Statements

A Tale of Two ifs pp. 332-335

Why Indentation Syntax? pp. 335-338

A Few Special Cases pp. 338-340

Doing Math on User Inputs pp. 342-343

Chapter 11: Assignments, Expressions, and Prints pp. 349-382

Chapter 12: If Tests and Syntax Rules pp.383-399

*Note: Since we are reading the book out of order, some examples in the reading will have logic that we haven't covered yet. It's ok if you don't know what those are, just extract what the reading is concentrating on and we'll get to the other logic later.

Lab/Homework (10 points)

All homework files can be added to GitHub repository in a folder for lesson 2. After you commit and sync the changes, submit the URL to the folder. I would suggest committing each file when you finish each part. You can sync the commits at the end. Feel free to commit and sync as many times as necessary. A commit/sync doesn't mean the project is finished.

Part 1:

1. Write an application (named H2P1.py) which prompts the user for their age and stores that as a variable.
2. Now write an expression that calculates their age in 10 years. Assign this to a new variable, and output a message to the console informing the user of how old they will be in 10 years.
3. Write the code necessary to ask the user to enter the current temperature in degrees Fahrenheit, storing the temperature into a variable.

4. Now write a single expression that converts the temperature from degrees Fahrenheit to degrees Celsius. Assign this to a new variable, and output a message to the console informing the user what the current temperature is in Celsius. To convert from °F to °C, subtract 32 and then multiply by 5/9. (Hint: How do you instruct the compiler your intended order of operation?)

Part 2:

1. Write a program (named H2P2.py) which prompts the user to enter basic book information:
 - Prompt the user to enter the title of the book.
 - Prompt the user to enter the name of the author.
 - Prompt the user to enter the publish year of the book.
 - Prompt the user to enter the total number of pages in the book.
2. Now write an expression to calculate how old the book is. Assign this result to a new variable.
3. Write a conditional if-else statement that conforms to the following rules:
 - If the age of the book is less than 10 years old, output: "This book is younger than ten years old."
 - Otherwise, output: "This book is at least ten years old."
4. Write another conditional if-else statement that conforms to the following rules:
 - If the number of pages in the book is less than 100, output: "This book is a short book."
 - If the number of pages in the book is between 100 and 300, output: "This book is an average book."
 - Otherwise, output: "This book is a long book."