Topic/Title: **CSC 160 Python**

Section 2: Objects

Keywords/Questions:

import math

what is the :. 2f or 3f or 4f

Notes: The built-in function type() returns the type of an object. Determines mutability vs.immutable. **Str()** and **Int()** are immutable. i.e. x = 2 + 2 mutable, print(type(x) => <class 'int'>

id() returns obj's identity i.e. x = 2+2 => 1752608 (memory address)

float is a data type for floating-point numbers. i.e. float(input)

scientific notation: 0.001 is 1x10-3, so it can be written as 1.0e-3
A floating-point literal using scientific notation is written using an "e" preceding the power-of-10 exponent, as in 6.02e23 to represent 6.02x1023.

OverflowError: Overflow occurs when a value is too large to be stored in the memory allocated by the interpreter

The syntax for outputting the float myFloat with two digits after the decimal point is
print(f'{myFloat:.2f}')
print(f'{math.pi:.4f}') reduces 3.141592653589793 to 3.1416

An **expression** is a combination of items, like variables, literals, operators, and parentheses, that evaluates to a value, like 2 * (x + 1)

A **literal** is a specific value in code like 2. An **operator** is a symbol that performs a built-in calculation, like +

x + 1 alone is an expression, but y = x + 1 is an assignment and not an expression.

Summary: