

COMP 143–30X Notes

Week 2/3

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Review

Data Types

- String —
- Integer —
- Float —
- Bool(ean)—

Print Command

Special Arguments

- End —
- Sep —

Examples

```
print("Hello, World!") #What would this print out?

name = "_____" #Put your name here

print("Nice to meet you,", name) #What would this print out?

print("Computer Science can do some cool things, right?")
```

Math Operators

Numerical Data Types

- + Add **Ex.** $2 + 3 =$
- Subtraction **Ex.** $2 - 3 =$
- * Multiply **Ex.** $2 * 3 =$
- / Divide **Ex.** $2/3 =$
- // Integer Divide **Ex.** $2//3 =$

% Modulo **Ex.** $5\%2 =$

** Exponent **Ex.** $2 ** 8$

We can also do roots with these operators, by doing $\sqrt[n]{x^a} \equiv x^{\frac{a}{n}}$

String Operators

+ Concatenation **Ex.** 'Hello, ' + 'World!' =

* Multiplication **Ex.** 'Hello' * 3 =

Basic Errors

TypeError

2 Styles you may hit

- can only concatenate str (not "int") to str
-or-
can only concatenate str (not "float") to str

This is when you do a string + a number

- unsupported operand type(s) for +: 'int' and 'str'
-or-
unsupported operand type(s) for +: 'float' and 'str'

This is when you do a number + a string

Styling

Python has a recommended style to it. While these rules are not required to be followed, it is recommended to follow them. These rules will be updated as they start to apply to us.

1. All variable names should be written in 'snake case', that is to say all lowercase, with underscores separating words.
Ex. student_id, average_grade, order_total, etc...
2. There should be 1 space between any operator, and any variable or literal.
Ex. $2 + 3$, "Hello" + "World" \Rightarrow These are correct.
 $2+3$, "Hello"+"World" \Rightarrow This is not correct
3. All python source code files should end with 1 blank line.

These rules can be found online by searching *Python PEP 8*