Bytes Beginner Fall 2021 Session 2!

Boston University Girls Who Code

How was your week?

Women in STEM Spotlight

- Egyptian-American computer scientist and CEO of AI software company *Affectiva*
- One of Forbes' Top 50 Women in Tech
- Driver of AI research, especially emotional recognition in AI softwares
- Applied AI into bettering communication for people with autism or mental health struggles
- Author of *Girl Decoded*

Rana el Kaliouby

Refresher!

Which one is an assignment operator?
A. #
B. =
C. ==

Variables can store…
A. strings
B. lists
C. integers
D. All of the above!

print('hello') **and** print("hello \nworld")
are valid print statements:
A. True
B. False

Refresher! - Answers

Which one is an assignment operator?
A.   #
B.   =
C.   ==

Variables can store…
A.   strings
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D.   All of the above!

print('hello') **and** print("hello \nworld")
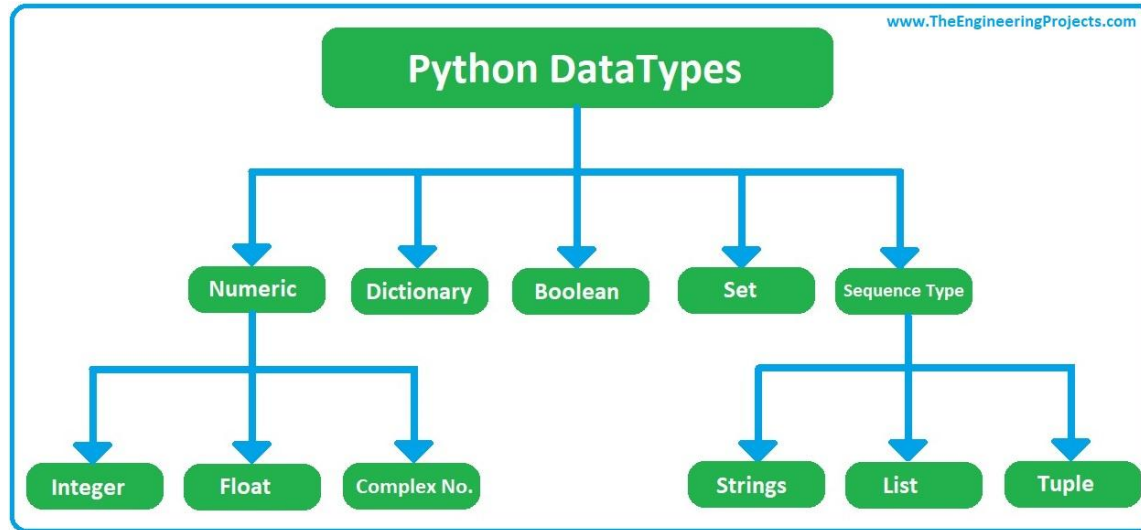**are valid print statements:**
A.   True
B.   False

Data Types

What are data types?
- Stored in variables
- Have different properties

Use **type()** to find a variable's data type:

age = 12
print(type(age))

Output: <class 'int'>

Arithmetic Operations

Can use many arithmetic operators in python

- + addition
- - subtraction
- * multiplication
- / division

Other operators:

% modulus: returns the remainder

// integer division: returns the result of the division with no decimal places

What do these return?

5%2 = ?? ⟶   1

7//3 = ?? ⟶   2

11%7 = ?? ⟶   4

New Functions

input()
- Takes user input to use in a program
- Allows for an interactive program

Ex:
input(str("Enter your name:"))

Console:
Enter your name:

While-loop
- Runs code within the loop while a certain condition is met
- Can keep track of a variable
  - while (x > 0):
- Or run continuously
  - while(True):

Calculator Activity!
Open your python IDE

Code in the drive

Questions?

Homework: Finish your calculator and add extra functions (exponential, remainder division)

See you next week!