

Week 2
Monday 9/8/2025

Simple Python Data

everything is an object

classes
data type } interchangeable

2.1. Variables, expressions and Statements

type conversion

```
print(3.14, int(3.14))  
print(str(17))
```

data types

integer
floating points
string

truncation towards zero: discards the decimal portion
e.g. `print(int(3.14))` → 3

2.3. Type conversion functions

```
print(float(...))
```

2.5. Variable names & keywords

case matters. `Gabby` ≠ `Gabby`

if — Statement

while

for

2.4. Variables

`n = 17` → `n` refers to the object 17
 `n` is assigned 17

begin with a letter

cannot repeat Python keywords

e.g. `class X`

2.6. Statements & Expressions

expression: combination of values, expressions, operators & calls to functions

type function

```
print(type["Hello World!"]) → str  
print(type(17)) → int  
print(type(3.2)) → float  
print(type("17")) → str
```

! no commas in the long number !

floating-point

e.g. 3.2

print can print any numbers with spaces

```
print(3.4, 45, 37)
```

2.2. Value & Data types

assignment token: `=`

equality: `==`

state snapshot

! `len`: return # of characters in a string !