

COMP 143—301

Week 4

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February 13, 2023

Exercise Review

Variable Names

```
number_one_--_Proper
user_sum__--_Proper
number1__--_Proper
one_number__--_Proper
1_number_--_Improper
```

Variable Assignment

```
user_id=10
user_name="Alex"
is_admin=True
```

‘Type’ Function

The type function is a useful piece of code that can be used to determine what datatype a given variable is.

We said that there are only 4 datatypes in python. However, this isn’t strictly true.

- Integer
- Float
- Complex Number
- Boolean
- String
- List, Tuple, Set, Dictionary

We will cover more of these later in the semester.

By using the ‘type’ function, it will tell us what datatype a variable falls under.

The ‘type’ function will return information regarding the datatype of an object

Lets do some examples:

```
type("Hello") -> <class 'str'>
type(1) -> <class 'int'>
type(4.1) -> <class 'float'>
type(True) -> <class 'bool'>
```

Using Variables

Make a variable called `tax_rate`, and set it to 0.0625. Then, create a variable called `item_price`, and set it to 20.0. Using these 2 variables, calculate the **total cost** of the item **and** tax.

```
tax_rate = 0.0625 # Massachusetts has a sales tax rate of 6.25%
item_price = 20.00 #The item is set to cost $20.00
final_price = (1 + tax_rate) * item_price # The final price of the item, including tax will be 106.25%
                                             # that of the normal price.
print(item_price) # Print it to the user.
```