Booleans

QUESTION TIME

Do you like pizza? Is the sky blue? Is it raining right now?
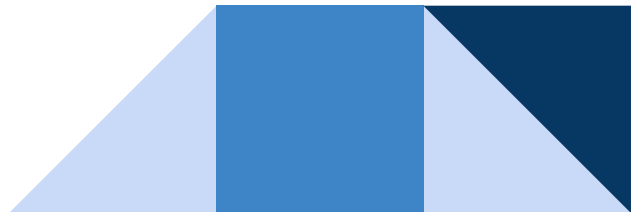
What are ways that you could answer these questions besides "yes" or "no"?

What are some drawbacks of allowing questions to be answered in this way?

Why is it sometimes helpful to only have two options?

What does it mean for a statement to be true?

What does it mean for a statement to be false?

What are Booleans?

Boolean values can be one of two things:

True

or

False

They can be thought of as the answer to a yes/no question.

Real life booleans vs Python booleans

Do you like pizza?   Yes!   like_pizza   = True

Is it raining outside?   No!   raining_outside   = False
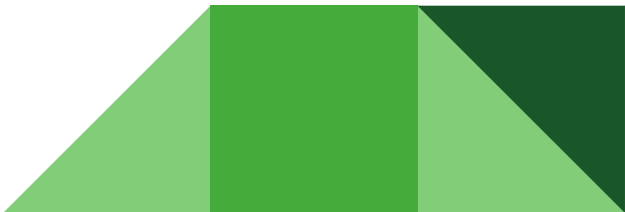
First letter
capitalized

NOT in quotes

Printing Booleans

If we have a boolean variable, we can print it by itself no problem, just like any other variable.

If we want to concatenate with strings, though, we need to typecast to string.

Examples:
```
like_pizza = True
is_raining = False
print("I like pizza: ")
print(like_pizza)
print("It is raining: " + str(is_raining))
```

Typecasting to Boolean

If we want to typecast a value as a boolean, we need to use the bool() function.

Let's do some guesswork! What do you think these typecasts will output?

```
bool("true")      -> True
bool("False")     -> True
bool("")          -> False
bool(1)           -> True
bool(0)           -> False
bool(100)         -> True
```

Typecasting FROM Boolean

If a boolean value is typecast as a string or integer, here is what the values will be:

Integer:
True -> 1
False -> 0

String:
True -> "True"
False -> "False"