

COOL ENOUGH 2 CODE?

Conditions in Python



# Data Types

- **Boolean** – `bool` – Either true or false
- **String** – `str` – Text data
- Numeric data
  - **Integer** – `int` – Numbers without decimals
  - **Float Point** – `float` – Numbers with decimals

- **Variables** can take on different values and store data in a computer's memory (RAM).
- Variables can be changed by the program.
- Variables can take on any data type, and with Python the data type with a variable can change too.
- Examples:

```
val1 = 1 # val1 is an integer variable  
val2 = "blaize" # val2 is a string variable
```

# Logical Operators

Symbol	Name	Description	True Conditions
==	equal to	Checks values for equivalence	2 == 2
!=	not equal	Checks values for inequivalence	2 != 1
>	greater than	Checks for the left side being greater than the right side	2 > 1
>=	greater than or equals	Checks for the left side being greater than or equal the right side	1 >= 1 2 >= 1
<	less than	Checks for the left side being less than the right side	1 < 2
<=	Less than or equals	Checks for the left side being greater than or equal the right side	1 <= 2 2 <= 2
or		Checks for at least one condition to be true	1 < 2 or 1 == 2
and		Checks for all both conditions to be true	1 < 2 and 1 == 1
not		Negates a Boolean	not(1 == 2)

# Assign Results to a bool

- The results of a logical operator can be assigned to a bool variable.

```
x = (1 == 2) # x is False
```

```
x = (1 == 1) # x is True
```

```
x = (1 < 1) # x is False
```

```
x = (1 <= 1) # x is True
```

# if – elif – else

- `if` is a keyword that is used to evaluate an expression and branch a program if the expression is true.
- `elif` can be used to alternative branches when the first `if` evaluates to false.
- `else` can be a catch all when all `if` and `elif` expressions evaluate to false.

# Code Blocks

Code blocks are denoted by **indentation** in Python. This groups statements in the code together. The code block ends when the indentation ends. Code blocks can be nested in other code blocks

Also note the colon (:) that marks the beginning of many code blocks in Python.

```
x = 1
if x == 1:
    print("x is 1")
    print("WooHoo!")
elif x == 2:
    print("x is 2")
    print("Boring!")
else:
    print("x is " + x)
    print("Okay...")
```

# Challenge

## Create a Text Adventure!

- Print a scenario and prompt the user to make a choice.
- Evaluate the choice and then show the outcome of the choice.
- Prompt the user for a second choice and then show the outcome of the second choice.