

# Decisions

'if statement' - performs some action when  
some criteria is true

```
if <condition>:
```

```
    print("condition is true")
```

# Boolean Variables

- variables that equate to either True or False

answer = True

wrong = False

# Constants

- a variable that doesn't change its value

e.g.  $\pi = 3.14159\dots$

- in Python, uppercase snake-case variables

identify constant variables

- e.g. `PI`, `PAY_RATE`, `MOVIE_NAME`

# Python Conventions

<https://www.python.org/dev/peps/pep-0008/>

- indentation = 4 spaces

Python 3 disallows mixing the use of tabs and spaces for indentation.

Limit all lines to a maximum of 79 characters.

# File Encodings

ASCII - American Standard Code for Information Interchange...

- max. 256 characters
- Unicode - many more characters allowed

# Conditions

- comparing integers to integers
- comparing strings to strings
- <, >, <=, >=, ==, !=
- compares variables with fixed values or variables with other variables

# Vacation or not?

- my salary  $> 1,000,000$
  - if yes: vacation!
- if not: ...no vacation...

# if...else statement

if <condition>:

...do something if True

else:

...do something if False



# if...elif...else statement

if <condition 1>:

...do if condition 1 is True

elif <condition 2>:

... do if condition 1 is False, but 2 is True

else:

... do if both conditions are False