MOD 3 DAY 1 - CODE EXPLAINED - Let's Begin Pythor

Tuesday, September 26, 2023 8:16 PM

ACT

`cd Desktop` will change to the desktop directory

`mkdir PythonStuff` will make a new directory/folder on the desktop.

`cd PythonStuff` will move to the newly created folder

`open .` on a Mac or `explorer .` on a Windows will open the current folder

`touch first_file.py` will create a file

`touch second_file.py` will create a second file

`ls` will show what is in the current directory

`cd ..` will move us up a directory back to Desktop

ACT

```
# Follow the below instructions in your terminal and write the commands below.

# Create a folder called LearnPython
mkdir LearnPython

# Navigate into the folder
cd LearnPython

# Inside LearnPython create another folder called Assignment1
mkdir Assignment1
```

```
# Inside Assignment1 create a file called quick_python.py
touch quick_python.py

# Add a print statement to quick_python.py
# add print("This file works!") in a python file

# Run quick_python.py
python quick_python.py

# Return to the LearnPython folder
cd ..

# Inside LearnPython create another folder called Assignment2
mkdir Assignment2

# Inside Assignment2 create a file called quick_python2.py
touch quick_python2.py

# Add a different print statement to quick_python2.py
# add print("This file also works!") in a python file

# Run quick_python2.py
python quick_python2.py
```

ACTIVITY 3

```
# Creates a variable with a string "Frankfurter"
title = "Frankfurter"

# Creates a variable with an integer 80
years = 80

# Creates a variable with the boolean value of True
expert_status = True

# Prints a statement adding the variable
```

```
# Prints a statement adding the variable
print("Nick is a professional " + title)

# Convert the integer years into a string and prints
print("He has been coding for " + str(years) + " years")

# Converts a boolean into a string and prints
print("Expert status: " + str(expert_status))

# An f-string accepts all data types without conversion
print(f"Expert status: {expert_status}")
```

ACTIVITY 4

```
# Create a variable called 'name' that holds a string
name = "Jacob Deming"

# Create a variable called 'country' that holds a string
country = "United States"

# Create a variable called 'age' that holds an integer
age = 25

# Create a variable called 'hourly_wage' that holds an integer
hourly_wage = 15

# Calculate the daily wage for the user
daily_wage = hourly_wage * 8

# Create a variable called 'satisfied' that holds a boolean
satisfied = True

# Print out "Hello <name>!"
print("Hello " + name + "!")

# Print out what country the user entered
print("You live in " + country)
```

print("You live in " + country)

# Print out the user's age
print("You are " + str(age) + " years old")

# With an f-string, print out the daily wage that was calculated
print(f"You make {daily_wage} per day")

# With an f-string, print out whether the users were satisfied
print(f"Are you satisfied with your current wage? {satisfied}")

ACTIVITY 5

Collects the user's input for the prompt "What is your name?"

Collects the user's input for the prompt "How old are you?" and converts the string to an integer.

Collects the user's input for the prompt "Is input truthy?" and converts it to a boolean. Note that non-zero,

non-empty objects are truth-y.

Creates three print statements that to respond with the output.

ACTIVITY 6

Take input of you and your neighbor

Take how long each of you have been coding

Add total month

Print results

ACTIVITY 7

```
x = 1

y = 10

# Checks if one value is equal to another

# Checks if one value is NOT equal to another

# Checks if one value is less than another

# Checks if one value is greater than another

# Checks if a value is greater than or equal to another

# Checks for two conditions to be met using "and"

# Checks if either of two conditions is met

# Nested if statements
```

ACTIVITY 8

```
# 1. oooo needs some work

# 2. Question 2 works!

# 3. GOT QUESTION 3!

# 4. Dan is in group three

# 5. Can ride bumper cars
```

ACTIVITY 9

Create a variable and set it as an List

Adds an element onto the end of a List

Returns the index of the first object with a matching value

Changes a specified element within an List at the given index

Returns the length of the List

Removes a specified object from an List

Removes the object at the index specified

Creates a tuple, a sequence of immutable Python objects that cannot be changed

ACTIVITY 10

Incorporate the random library

Print Title

Specify the three options

Computer Selection

User Selection

Run Conditionals

ACTIVITY 11

Loop through a range of numbers (0 through 4)

Loop through a range of numbers (2 through 6 - yes 6! Up to, but not including, 7)

Iterate through letters in a string

Iterate through a list

Loop while a condition is being met

ACTIVITY 12

Initial variable to track game play

While we are still playing...

    # Ask the user how many numbers to loop through

    # Loop through the numbers. (Be sure to cast the string into an integer.)

        # Print each number in the range

    # Once complete...

BONUS

Initial variable to track game play

Set start and last number

While we are still playing...

    # Ask the user how many numbers to loop through

    # Loop through the numbers. (Be sure to cast the string into an integer.)

        # Print each number in the range

    # Set the next start number as the last number of the loop

    # Once complete...