

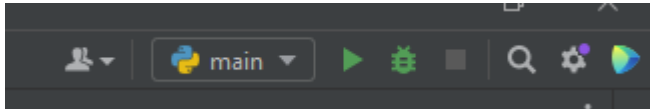
## Project 2

### String Variables and Concatenation

We are going to make a program that prints out your name!

*Try running your program to check if it works for each line.*

There's a green play button at the top right which is for running the program:



If you see red lines at the bottom after running your program then it means you encountered **ERRORS** and something went wrong. Try looking back at your code and changing some things.

*Each step represents its own line in the program.*

**Step 0:** Create a new python project in your IDE (I will help)

**Step 1:** Create a variable named *My\_Name* assigned to a **string** variable of your name

**EX:** `My_Name = "Tom"`

**Step 2:** Create a variable named *Greeting* assigned to the **string** value: "Bot: Hello! How are you"

**Step 3:** Print the following text containing the *My\_Name* variable: "Hello! How are you *My\_Name*?" using string concatenation

**EX:** `print("blah blah blah " + My_Name) # TRY THIS!`

**EX:** `print("blah blah blah", My_Name, "!!!") # TRY THIS TOO! (Not string concatenation but could get the same results)`

**Hint:** We use the + symbol in between two strings like so: "hello " + "world"

**EX:** `print("hello" + "world")`

**Step 4:** Create a variable named *Feeling* assigned to ONE of the following **string** values: "**Happy**", "**Sad**", "**Angry**", or "**Meh**"

**Step 5:** Create a variable named *Start\_Response* assigned to the **string** value: "I am feeling "**Notice the space between the word feeling and last double quote.**

**Step 6:** Now we will combine them together and put them into a new variable.

Create a variable named *Response* assigned to the both of them combined like so:

`Response = Start_Response + Feeling`

**Step 7:** Let's add an exclamation mark at the end! We do this by with this:

Same variable name

Response = Response + "!"

String value we are adding on

We're getting the known string value in the Response variable.  
Q: What is it right now?

**Step 8:** Print out the value assigned to the *Response* variable

**Step 9:** Print the following text containing the *Feeling* variable: "Bot: I can see you are feeling "  
+ *Feeling* + " today"

**YOU'RE AWESOME!** You made a BOT that gives a reply to your  
**FEELINGS!!!! :O**

**Try going back and changing the value of Feelings to something else and running your program again. It'll be a little different. :>**

## Practice

We are going to make a slightly more complicated bot program.

**NOTE:** The **#** symbol is for making single line comments. Anything *right* of the **#** symbol is invisible to your program on that line only. Make sure to write your code to the left of the **#** symbol.

**Step 0:** Create a new python file in your IDE (**I will help**)

**Step 1:** *Copy the following code below*

```
# Fill in the missing pieces of code to make the program work!
# NOTE TO SELF DO NOT MOVE THE LINES! Just remove the ""'s
Bot_Name = # <---- Give your bot a name
Your_Name = # <---- Insert your name here
print(Bot_Name + ": " + "Hello! " + Your_Name + "!")
"""
# Bot asking about the weather
Weather_Condition = # <---- Type the weather condition here
print(Bot_Name + ": " + "Have you seen the weather lately? I think it's " +
Weather_Condition + " outside.")
"""
"""
# Bot asking for a topic that you have
Bot_Question1 = "What's do you want to talk about today?"
print(Bot_Name + ": " + ) # <---- How do I make the bot ask the question?
#What do I need to add? There's only ONE thing missing!
Your_Response1 = # <---- Enter your response to the question
print(Your_Name + ": " + ) # <---- How do I make it so that it says your
#response? There's only ONE thing missing!
"""
"""
# Bot replying to your topic
Bot_Response1 = "I understand. You want to talk about " + # <---- How do I
#make the bot say what you wanted to talk about...
print() # <---- Add code to make the bot say its response. Kind of like #above
(if done correctly)
"""
"""
# Bot asks what you like about your topic
Your_Topic = Your_Response1 # <---- I am copying the value of Your_Response1
#into a new variable
Bot_Question2 = "What do you like about " + + "?" # <---- What do you add in
#the middle of the plus signs?
print() # <---- Add missing code to print out the response like the code
#above
"""
"""
# Your response to the question
Your_Response2 = # <---- Enter your response to the question (a sentence)
```

```
print() # <---- Add missing code to print out your response like the code
#above
"""
```

**Step 2:** Try your best to fill in the code line by line. Read the comments and enter what you think is best.

**Step 3:** Run the program with the green play button to top right to check if it works once you feel it is done. Call if you ever get stuck.

**Step 4:** Call for my assistance when your program works so I can uncomment the next section for you to work on.

## Try It On Your Own -- Call For Help If You're Stuck

The program is a simulation of a bank account in a bank that has these functions/actions: storing (keeping track) money, depositing (inserting) money, withdrawing (taking out) money

**Step 0:** Create a new python file in your IDE

**Step 1:** Create a variable named *BankAcc\_ID* and assign it to a **positive integer** value that has exactly 10 digits.

(An ID is a way of *uniquely* identifying someone or something -- it is often a positive integer number) This is meant to hold the ID for just one bank account.

**Step 2:** Create a variable named *Bank\_Name* and assign it to a **string** value.  
Either make up a bank name or use an existing one.

**Step 3:** Create a variable named *BankAcc\_User* and assign it to a **string** value.  
The variable is meant to hold/store the name of the person who owns the Bank Account.

**Step 4:** Create a variable named *BankAcc\_Money* and assign it a **positive float** value.  
The variable is meant to hold/store the money the user has in their account.

**Step 5:** Print a message from the bank that uses the, *BankAcc\_ID*, *Bank\_Name*, *BankAcc\_User*, and *BankAcc\_Money* variable to display all three pieces of information (Bank Account ID, Bank Name, Bank User's Name, and Bank Account Money Amount).

If you're unsure what to **output** you can try to mimic the following:

"Hello! At (Bank Name), we currently have Account Number (Bank Account ID) registered to (Bank User's Name) with (Bank Account Money Amount) stored."

**Remember this should only be done in one line.**

**HINT01:** You can either use string concatenation (+) or the commas (,) to print out information.

**HINT02:** If you use string concatenation with numerical values then you will have to use the **str()** function.

**Step 6:** Print the following message: "I would like to withdraw (take out) 10 dollars from my account please."

**Step 7:** Using the *BankAcc\_Money* variable, subtract ten dollars and store the new value back into the *BankAcc\_Money* variable

**HINT:**

**# Try to copy and paste the code below into your program and see what happens.**

```
Num = 10
Num = Num + 10
print(Num)
```

**Step 8:** Print the new amount stored in *BankAcc\_Money*. This is meant to represent stored in the account now.

**Step 9:** Print the following message: "I would like to deposit (put in) 10000 dollars to my account please."

**Step 10:** Like Step 7, use the *BankAcc\_Money* variable to add 10000 dollars to the account.

**Step 11:** Print the new amount stored in *BankAcc\_Money*.

**Step 12 (Optional, If You Have Time):** Using the *BankAcc\_Money* variable apply a 50% interest rate to the money you have stored.

**HINT:** To do this you will need to multiply the current amount of money in your Bank Account by 1.5.

**CONGRATULATIONS!!!! YOU JUST SIMULATED HAVING A BANK ACCOUNT WITH CODE :D**