Programming Problem 3: Functions

> The purpose of this assignment is to test your understanding and application of the concepts discussed in **Week 2**:
>
> - define functions that accept parameters and return values
> - call functions with arguments
> - perform user input validation and exception handling

Specifications

Change the code in `assignment3.py` so that **areaTriangle** takes parameters for the **base** and **height** of a triangle and computes its area. The formula provided is correct (base*height)/2

Then, enhance your code to:

- Ask the user to provide input from base and height.
- Validate user input to be positive integer numbers.
- Display 'Wrong input' if not valid and quit.
- Call the function to calculate the area and print the result.

Some Technical Details: A Basic Python main()

In some Python scripts, you may see a function definition and a conditional statement that looks like the example below:

```
def main():
    print("Hello World!")

if __name__ == "__main__":
    main()
```

In this code, there is a function called main() that prints the phrase Hello World! when the Python interpreter executes it. There is also a conditional (or if) statement that checks the value of **name** and compares it to the string "**main**". When the if statement evaluates to True, the Python interpreter executes main().

In this program write your code to accept user input in def main():

{% next %}

Execute and Test your program

Remember: in order to execute your code you type in the terminal:

```
python assignment3.py
```

Test your function with base = 12 and height = 45 the function should return 270.

{% next %}

Check Your Code

Execute the below to evaluate the correctness of your code using `check50`, but be sure to test it yourself before that... Login with your `GitHub username` and `Personal Access Token` when prompted. For security, you'll see asterisks (`*`) instead of the actual characters in your token.

If you do not have generated a Personal Access ToKen follow the instructions: https://docs.github.com/en/authentication/keeping-your-account-and-data-secure/creating-a-personal-access-token

```
check50 mkotsovoulou/ods6001a/main/assignments/assignment3
```

Execute the below to evaluate the style of your code using `style50`.

```
style50 assignment3.py
```

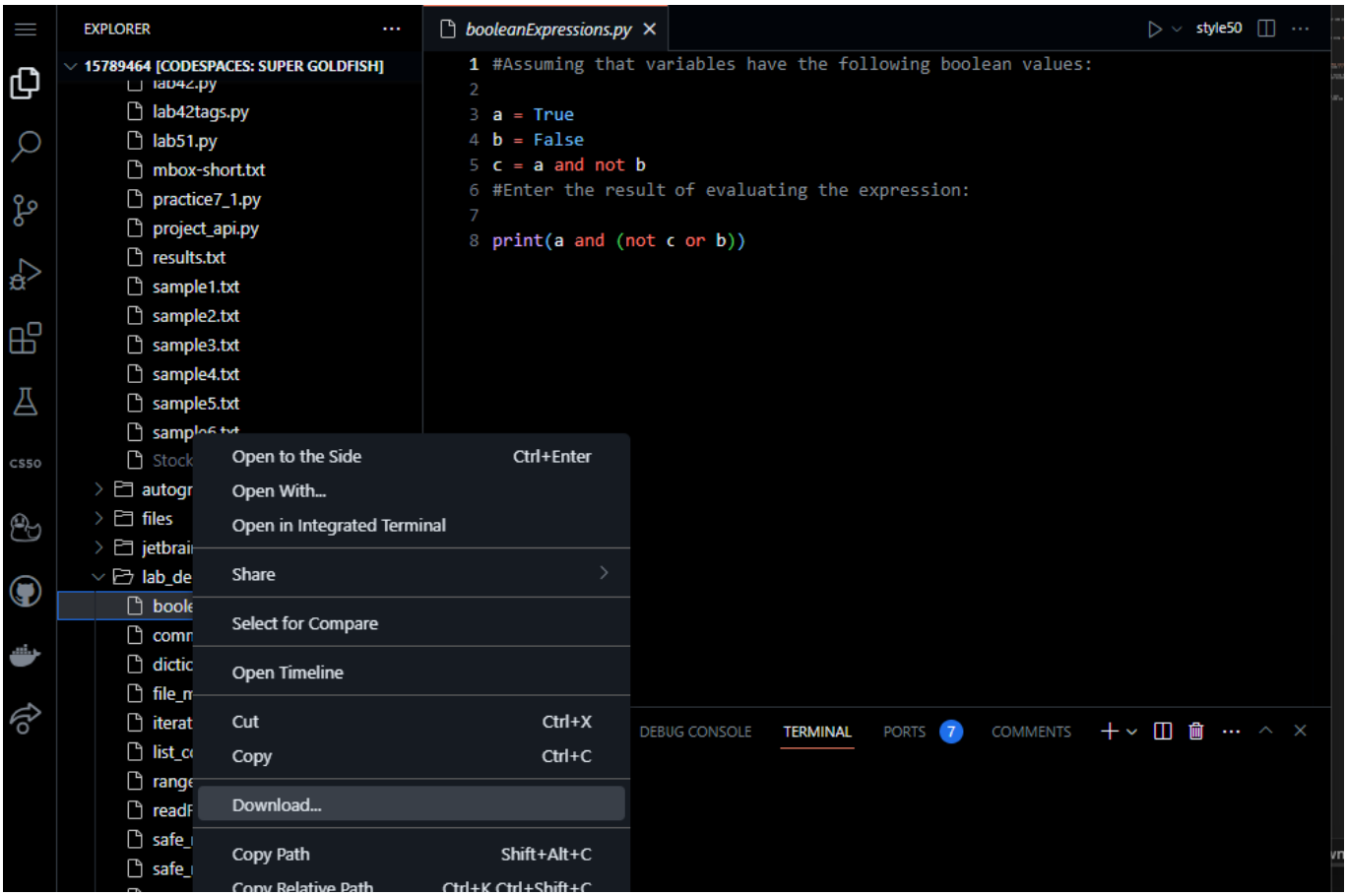
{% next %}

Submit your code

Execute the command below, logging in with your `GitHub username` and `Personal Access Token` when prompted. For security, you'll see asterisks (`*`) instead of the actual characters in your token.

```
submit50 mkotsovoulou/ods6001a/main/assignments/assignment3
```

You can re-submit your solution as many times as you want. When you are happy with your solution, download the code and upload it to Canvas.


EXPLORER
booleanExpressions.py
style50
15789464 [CODESPACES: SUPER GOLDFISH]
lab42tags.py
lab51.py
mbox-short.txt
practice7_1.py
project_api.py
results.txt
sample1.txt
sample2.txt
sample3.txt
sample4.txt
sample5.txt
files
jetbrai
lab_de
#Assuming that variables have the following boolean values:
a = True
b = False
c = a and not b
#Enter the result of evaluating the expression:
print(a and (not c or b))
Open to the Side Ctrl+Enter
Open With...
Open in Integrated Terminal
Share
Select for Compare
Open Timeline
Cut Ctrl+X
Copy Ctrl+C
Download...
Copy Path Shift+Alt+C
DEBUG CONSOLE
TERMINAL
PORTS 7
COMMENTS

Done!