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
```

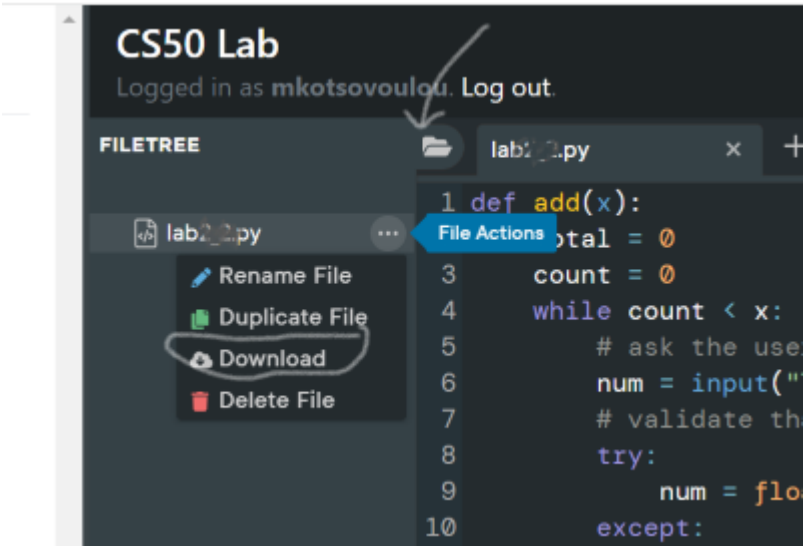
{% next %}

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.


CS50 Lab
Logged in as mkotsovoulou. Log out.
FILETREE
lab2_2.py
lab2_2.py
File Actions
Rename File
Duplicate File
Download
Delete File
1 def add(x):
3 count = 0
4 while count < x:
5 # ask the use
6 num = input("
7 # validate th
8 try:
9 num = flo
10 except:

Done!

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