Python Basics

Using a web-based code editor, learn the basics of Python and put your knowledge into practice by eventually coding a short Bitcoin investment project.

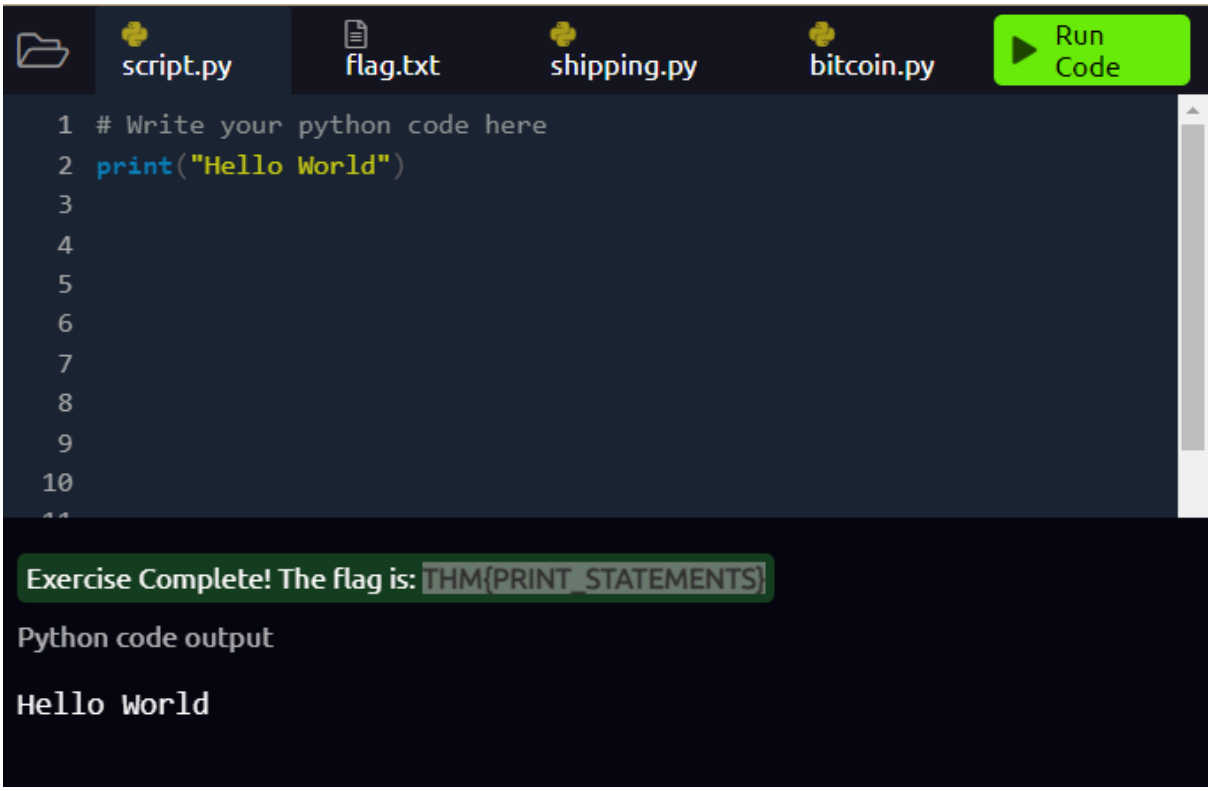
Task 2 Hello World

On the code editor, print "Hello World". What is the flag?

Answer: **THM{PRINT_STATEMENTS}**

➔ I clicked the “view site” button

CODE: print("Hello World")

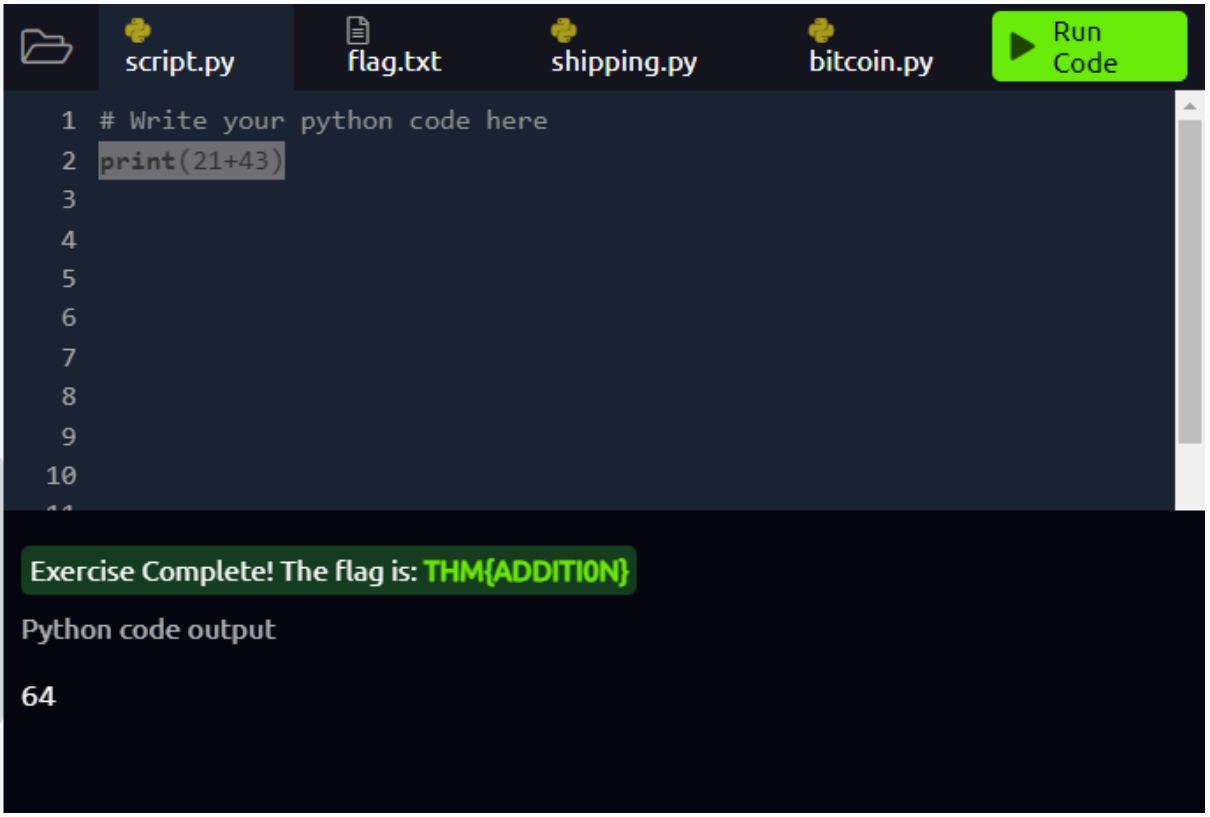


Task 3 Mathematical Operators

In the code editor, print the result of 21 + 43. What is the flag?

Answer: **THM{ADDITI0N}**

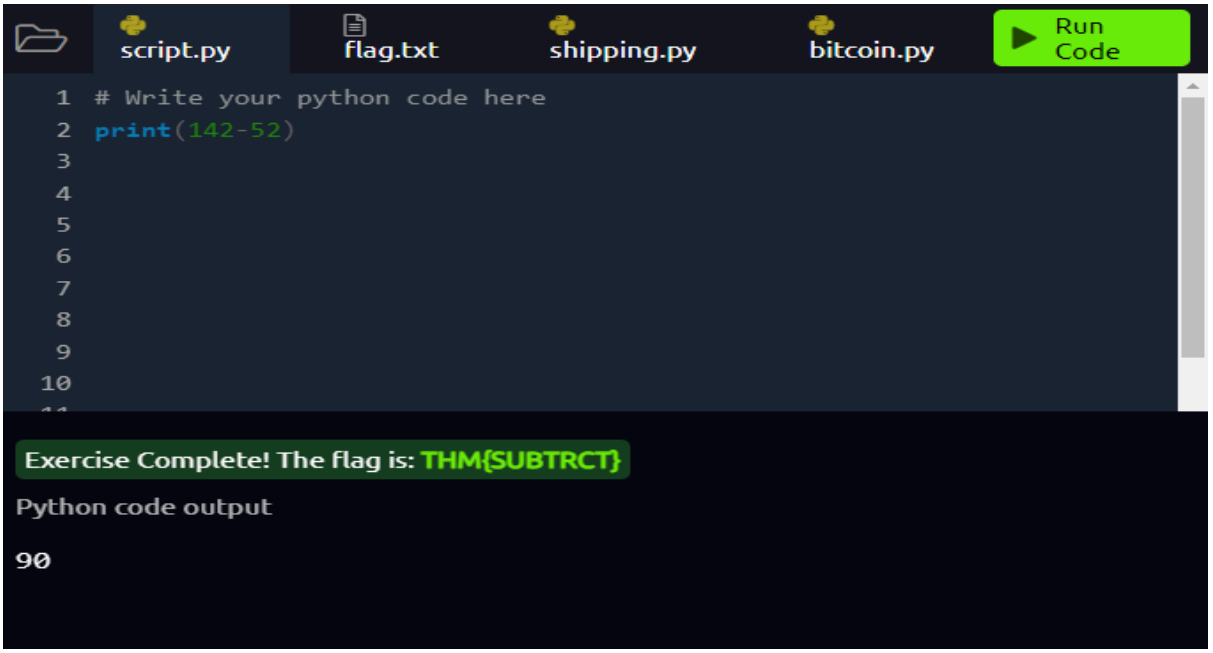
CODE: print(21+43)



Print the result of 142 - 52. What is the flag?

Answer: THM{SUBTRCT}

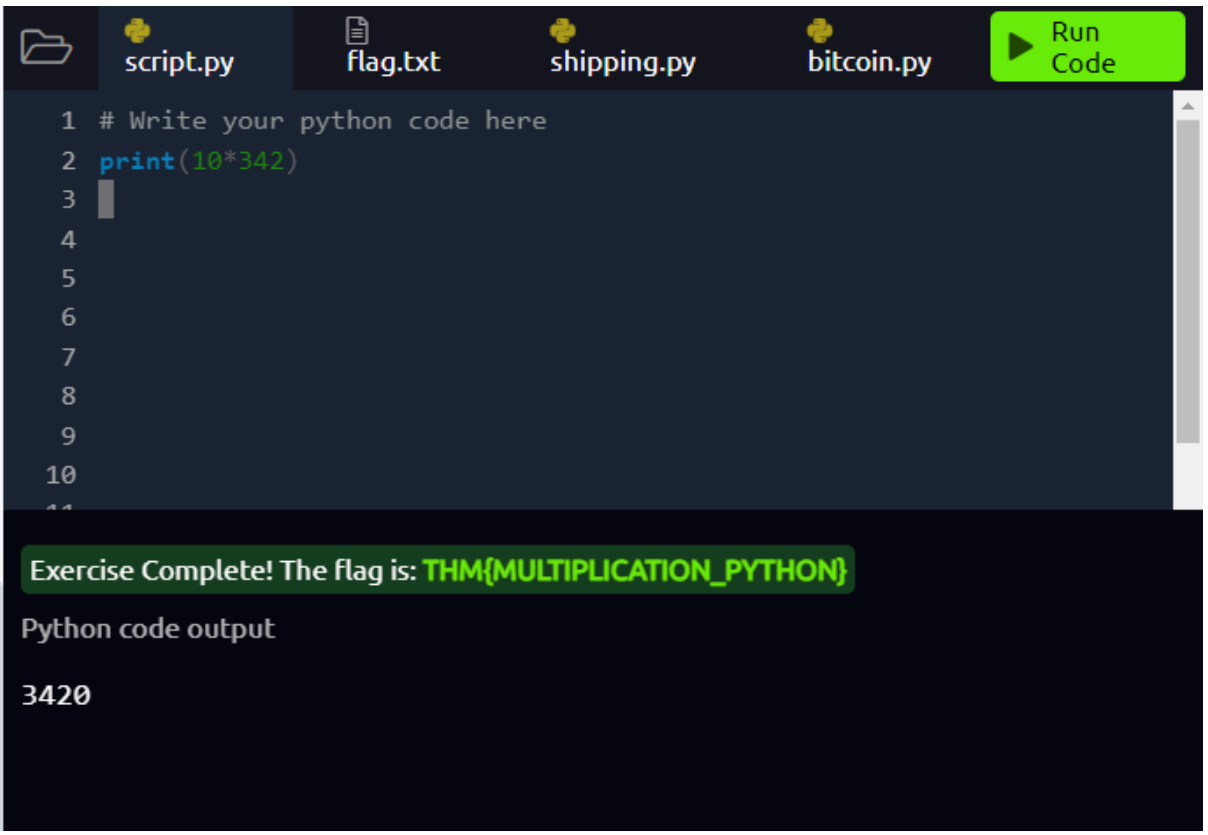
CODE: print(142-52)



Print the result of 10 * 342. What is the flag?

Answer: **THM{MULTIPLICATION_PYTHON}**

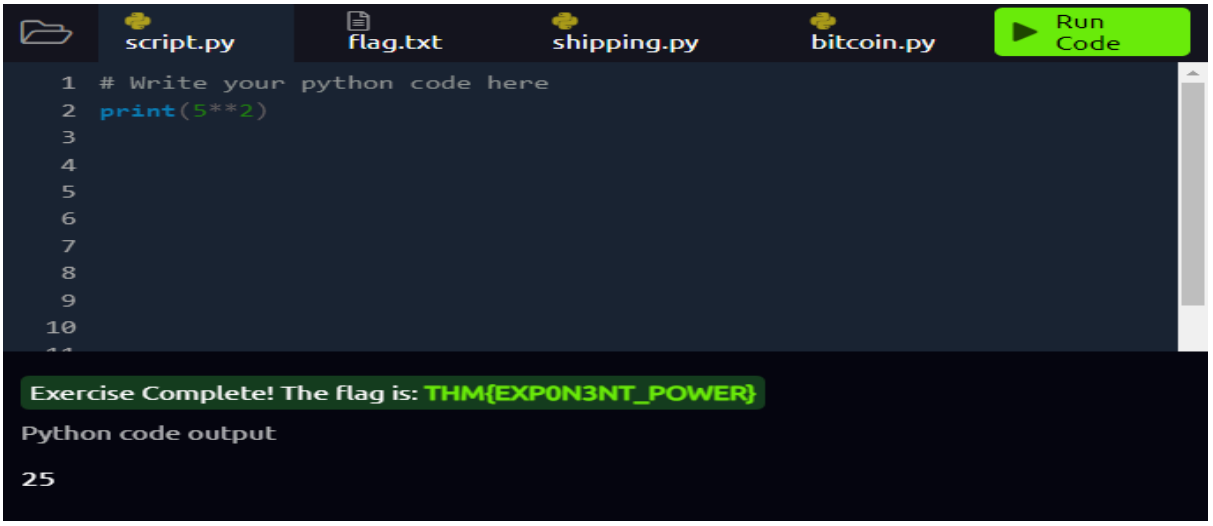
CODE: print(10*342)



Print the result of 5 squared. What is the flag?

Answer: **THM{EXP0N3NT_POWER}**

CODE: print(10*342)



Task 4 Variables and Data Types

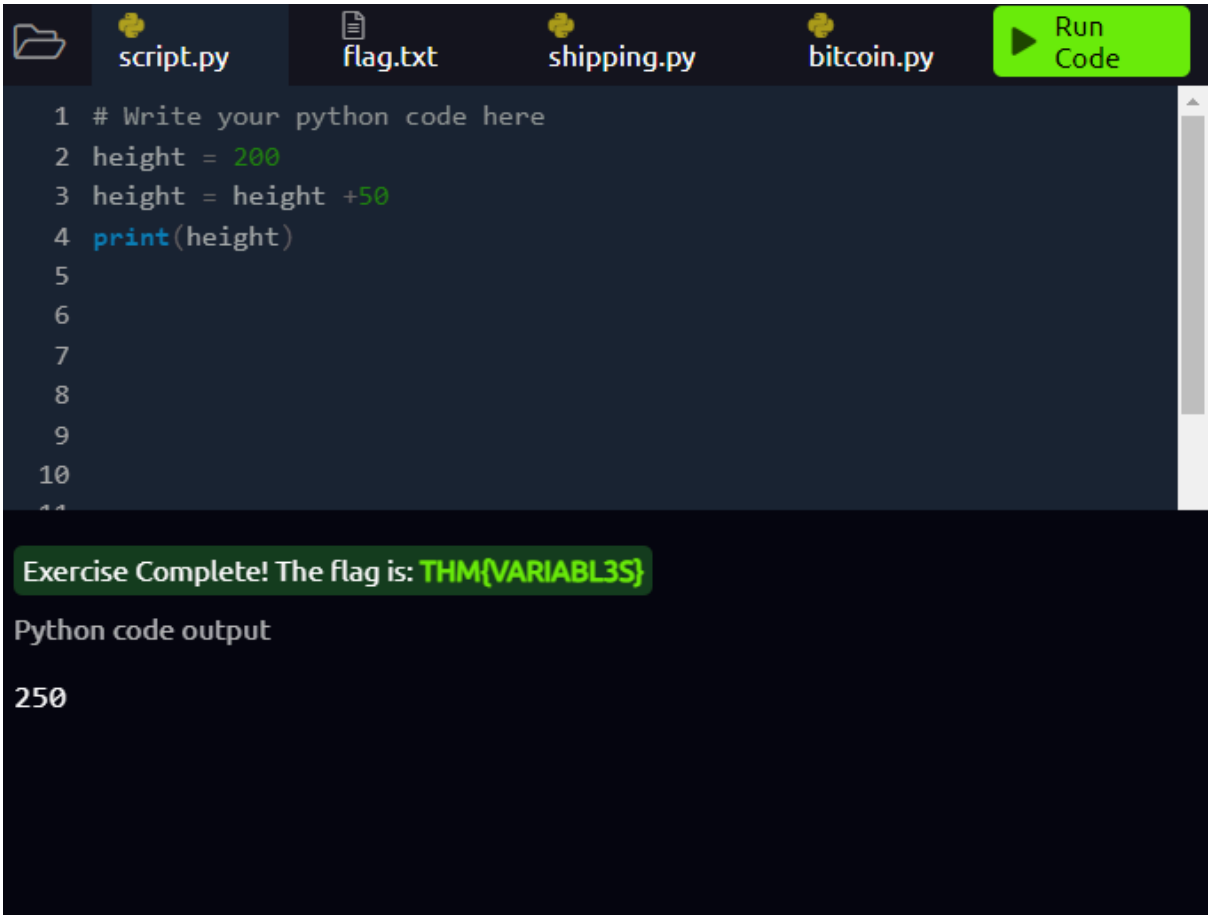
On another new line, print out the value of height. What is the flag that appears?

Answer: THM{VARIABL3S}

- ➔ I created a variable called height and set its initial value to 200
- ➔ On a new line, I added 50 to the height variable
- ➔ Then printed out the value of height

CODE:

```
height = 200
height = height + 50
print(height)
```



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Task 6 Shipping Project Introduction to If Statements

Once you've written the application in the code editor's shipping.py tab, a flag will appear, which is the answer to this question.

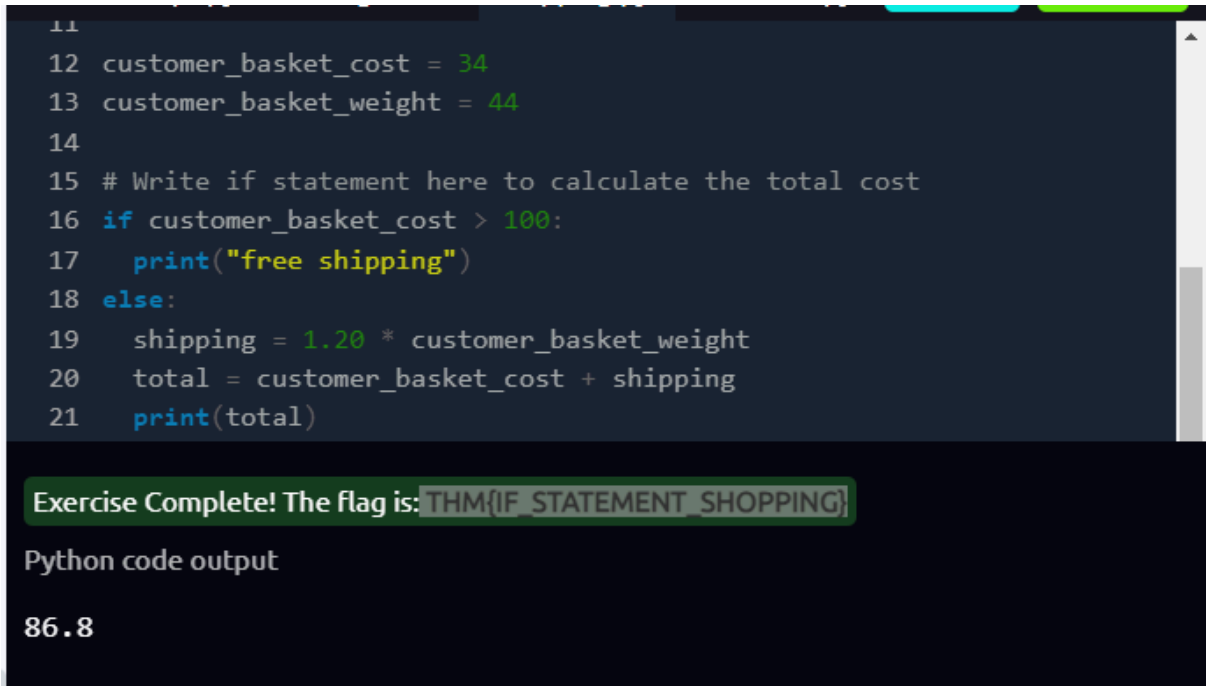
➔ I clicked on the shipping.py tab

Answer: **THM{IF_STATEMENT_SHOPPING}**

CODE:

```
customer_basket_cost = 34
customer_basket_weight = 44

# Write if statement here to calculate the total cost
if customer_basket_cost > 100:
print("free shipping")
else:
shipping = 1.20 * customer_basket_weight
total = customer_basket_cost + shipping
print(total)
```



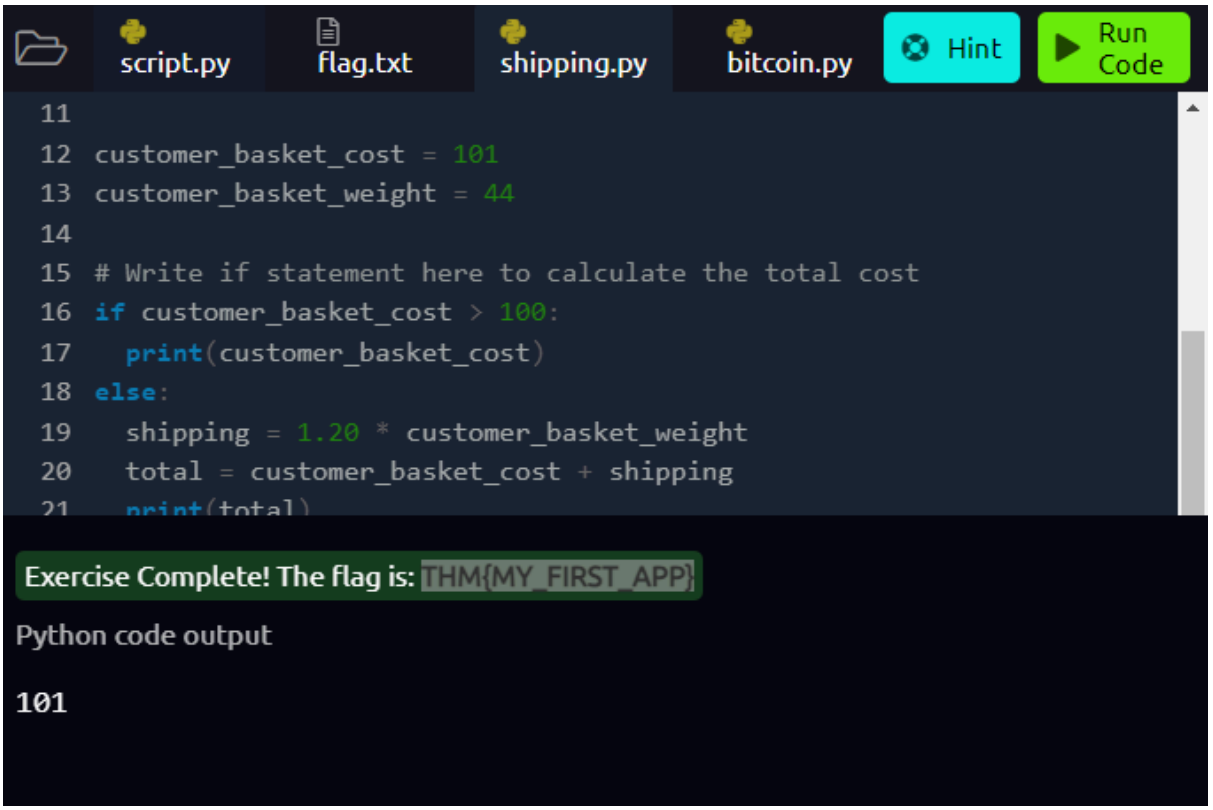
In shipping.py, on line 12 (when using the Code Editor's Hint), change the customer_basket_cost variable to 101 and re-run your code. You will get a flag (if the total cost is correct based on your code); the flag is the answer to this question.

Answer: THM{MY_FIRST_APP}

CODE:

```
customer_basket_cost = 101
customer_basket_weight = 44

# Write if statement here to calculate the total cost
if customer_basket_cost > 100:
  print(customer_basket_cost)
else:
  shipping = 1.20 * customer_basket_weight
  total = customer_basket_cost + shipping
  print(total)
```



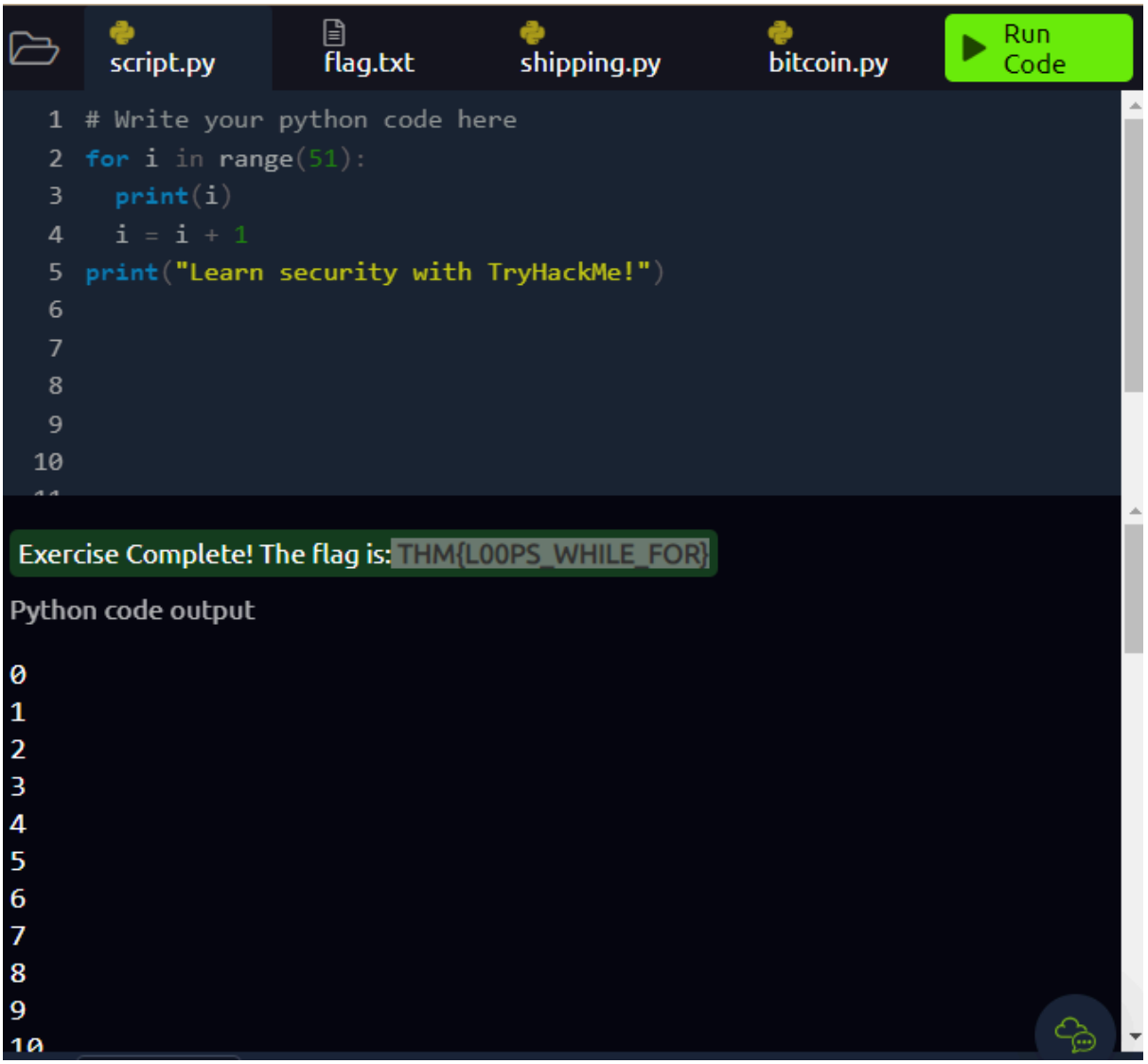
Task 7 Loops

On the code editor, click back on the "script.py" tab and code a loop that outputs every number from 0 to 50.

Answer: **THM{L00PS_WHILE_FOR}**

CODE:

```
for i in range(51):
  print(i)
  i = i + 1
```



Task 8 Bitcoin Project Introduction to Functions

Once you've written the bitcoinToUSD function, use it to calculate the value of your Bitcoin in USD, and then create an if statement to determine if the value falls below $30,000; if it does, output a message to alert you (via a print statement).

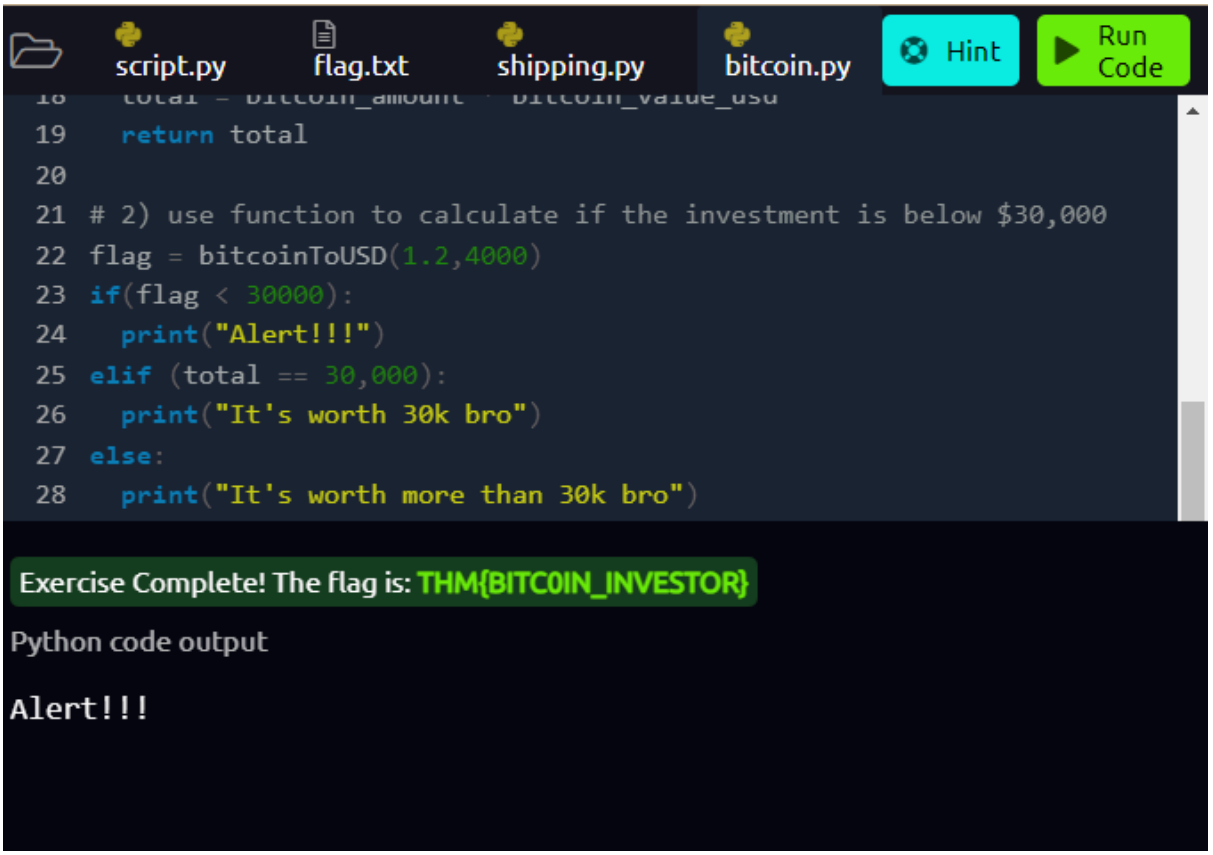
Answer: THM{BITC0IN_INVESTOR}

CODE:

```
investment_in_bitcoin = 1.2
bitcoin_to_usd = 40000

# 1) write a function to calculate bitcoin to usd
def bitcoinToUSD(bitcoin_amount, bitcoin_value_usd):
  total = bitcoin_amount * bitcoin_value_usd
  return total

# 2) use function to calculate if the investment is below $30,000
flag = bitcoinToUSD(1.2,4000)
if(flag < 30000):
  print("Alert!!!")
elif (total == 30,000):
  print("It's worth 30k bro")
else:
  print("It's worth more than 30k bro")
```



Task 9 Files

In the code editor, write Python code to read the flag.txt file. What is the flag in this file?

Answer: THM{F1LE_R3AD}

CODE:

```
# Write your python code here
file = open("flag.txt", "r")
print(file.read())
```

END!!!