

LAPORAN TUGAS
PEMBELAJARAN TRYHACKME
“Phyton Basic”



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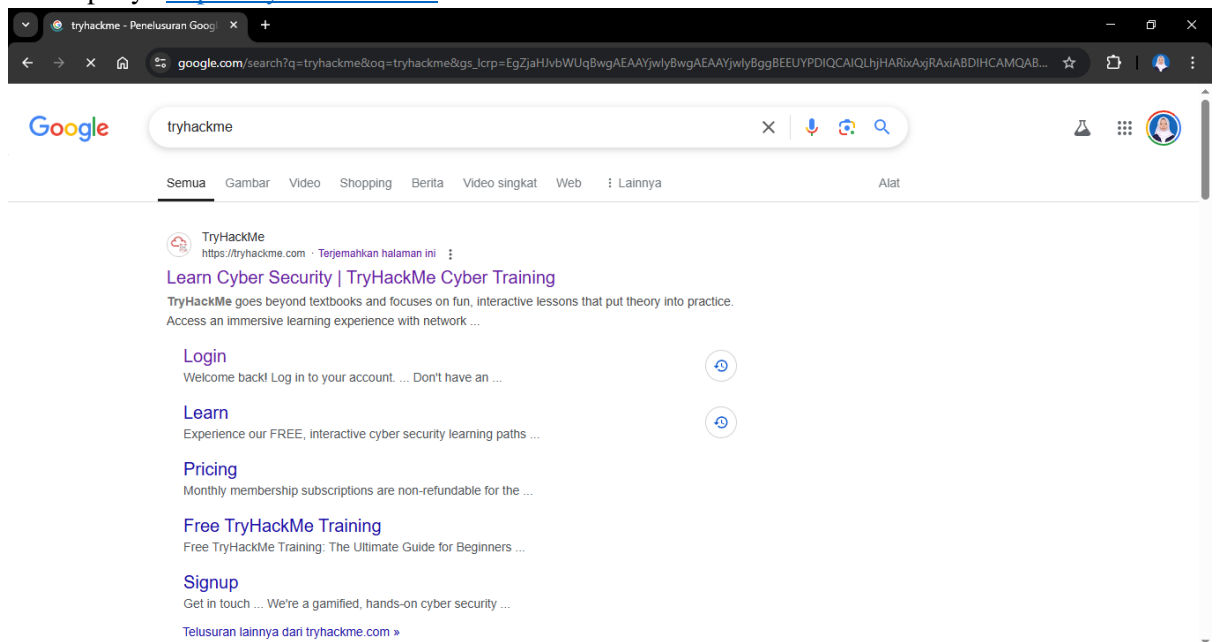
POLITEKNIK NEGERI MALANG PSDKU LUMAJANG

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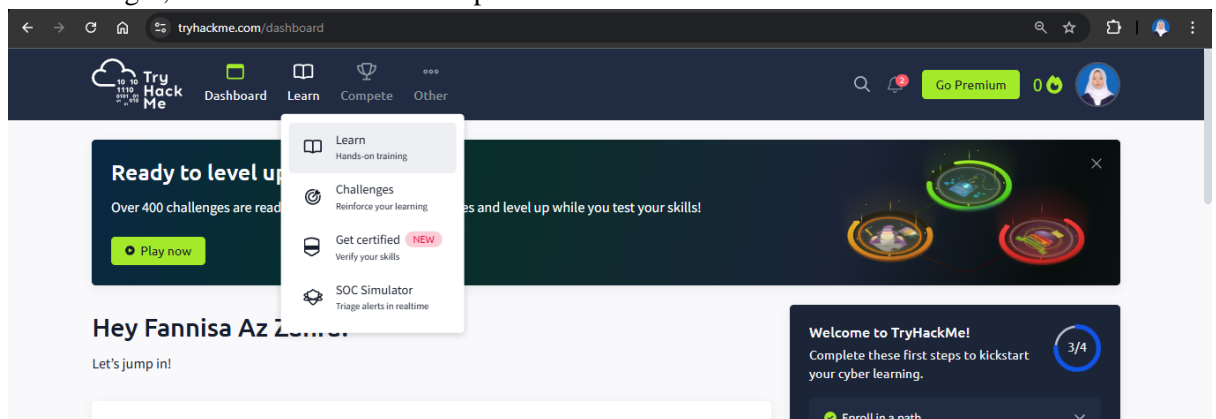
Jawa Timur 67314

2025

1. Buka laman chrome, lalu ketikkan tryhackme kemudian Login dengan akun yang sudah kalian punya <https://tryhackme.com/>



2. Setelah login, masuk ke dashboard dan pilih learn.



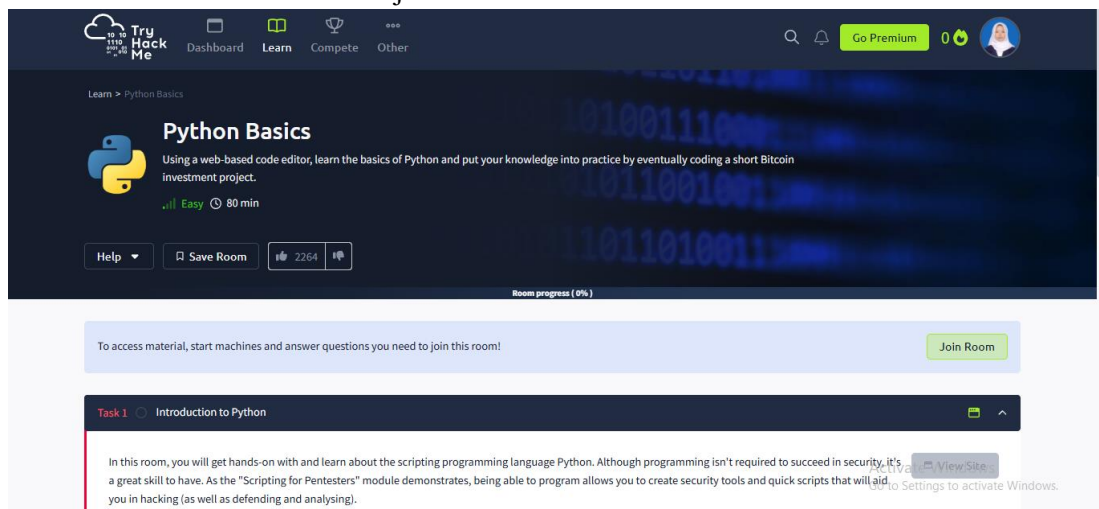
3. Setelah itu scroll kebawah dan pilih Free Roadmap



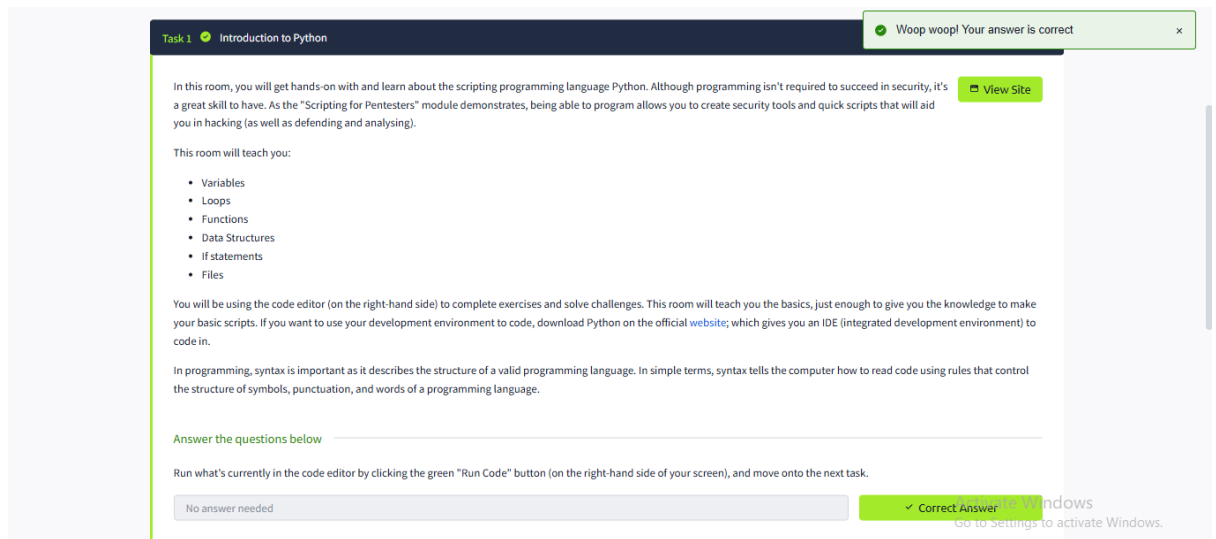
4. Lalu scroll kebawah dan pilih “room python basic”



5. Setelah masuk room klik untuk “join room”



6. Task 1.



7. Task 2.

Room progress (11%)

Task 2: Hello World

To begin, let's create a simple program that outputs some text.

```
# This is an example comment
print("Hello World")
```

As you can see from the example code block above, it's just one line (shown on line 2), and when we run this code, it will output the text `hello world`. Let's break this down. In the example, line 1 is a comment, a line starting with a hashtag (#) symbol and is not run by the computer. A comment is written by the programmer (you) to help other people reading the code understand what is going on.

We can control what is output to the screen by using the `print()` statement. Anything inside of the parenthesis (`()`) will be output. However, because we are printing a string (more on data types later in this room), we have to put them inside of quotations `" "`.

Please note, this room's examples are for Python3.

Answer the questions below

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

THM[PRINT_STATEMENTS] ✓ Correct Answer ? Hint

script.py flag.txt shipping.py bitcoin.py

```
1 # Write your python code here
2 print("Hello World")
3
4
5
6
7
8
9
10
11
12
13
14
```

Woop woop! Your answer is correct

Exercise Complete! The flag is: THM[PRINT_STATEMENTS]

Python code output

Hello World

8. Taks 3.

Room progress (11%)

Symbol	Syntax
Greater than	>
Less than	<
Equal to	==
Not Equal to	!=
Greater than or equal to	>=
Less than or equal	<=

Answer the questions below

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

THM[ADDITION] ✓ Submit ? Hint

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

____{_____} ✓ Submit

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

____{_____} ✓ Submit

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

____{_____} ✓ Submit ? Hint

script.py flag.txt shipping.py bitcoin.py

```
1 # Write your python code here
2 print(21+43)
3
4
5
6
7
8
9
10
11
12
13
14
```

Exercise Complete! The flag is: THM[ADDITION]

Python code output

64

Activate Windows

a)

Room progress (22%)

Symbol	Syntax
Greater than	>
Less than	<
Equal to	==
Not Equal to	!=
Greater than or equal to	>=
Less than or equal	<=

Answer the questions below

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

THM[ADDITION] ✓ Correct Answer ? Hint

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

THM[SUBTRACT] ✓ Correct Answer

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

____{_____} ✓ Submit

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

____{_____} ✓ Submit ? Hint

script.py flag.txt shipping.py bitcoin.py

```
1 # Write your python code here
2 print(142-52)
3
4
5
6
7
8
9
10
11
12
13
14
```

Woop woop! Your answer is correct

Exercise Complete! The flag is: THM[SUBTRACT]

Python code output

90

Activate Windows

b)

Room progress (27%)

Symbol	Syntax
Greater than	>
Less than	<
Equal to	==
Not Equal to	!=
Greater than or equal to	>=
Less than or equal	<=

Answer the questions below

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

THM[ADDITION] ✓ Correct Answer Hint

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

THM[SUBTRACT] ✓ Correct Answer

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

THM[MULTIPLICATION_PYTHON] ✓ Correct Answer

script.py flag.txt shipping.py bitcoin.py Run Code

```

1 # Write your python code here
2 print(10**342)
3
4
5
6
7
8
9
10
11
12
13
14

```

Exercise Complete! The flag is: THM[MULTIPLICATION_PYTHON]

Python code output

3420

c)

Room progress (27%)

Symbol	Syntax
Greater than	>
Less than	<
Equal to	==
Not Equal to	!=
Greater than or equal to	>=
Less than or equal	<=

Answer the questions below

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

THM[ADDITION] ✓ Correct Answer Hint

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

THM[SUBTRACT] ✓ Correct Answer

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

THM[MULTIPLICATION_PYTHON] ✓ Correct Answer

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

THM[EXPONENT_POWER] ✓ Correct Answer Hint

script.py flag.txt shipping.py bitcoin.py Run Code

Woop woop! Your answer is correct

```

1 # Write your python code here
2 print(5**2)
3
4
5
6
7
8
9
10
11
12
13
14

```

Exercise Complete! The flag is: THM[EXPONENT_POWER]

Python code output

25

Activate Windows
Go to Settings to activate Windows.

d) Task 4.

Room progress (50%)

- Boolean** - Used for data that is restricted to True or False options
- List** - Series of different data types stored in a collection

Title	Rating	Times Viewed	Favorite	Seen By
Star Wars	9.8	13	True	Alice, Bob
Matrix	8.5	23	False	Charlie
Indiana Jones	6.1	3	False	Daniel, Evie

Answer the questions below

In the code editor, create a variable called height and set its initial value to 200.

No answer needed ✓ Correct Answer

On a new line, add 50 to the height variable.

No answer needed ✓ Correct Answer

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

THM[VARIABLES] ✓ Correct Answer

script.py flag.txt shipping.py bitcoin.py Run Code

Woop woop! Your answer is correct

```

1 # Write your python code here
2 height = 200
3 height = height + 50
4 print(height)
5
6
7
8
9
10
11
12
13
14

```

Exercise Complete! The flag is: THM[VARIABLES]

Python code output

250

Activate Windows

10. Task 5.

Task 5 Logical and Boolean Operators

Logical operators allow assignment and comparisons to be made and are used in conditional testing (such as if statements).

Logical Operation	Operator	Example
Equivalence	==	if x == 5
Less than	<	if x < 5
Less than or equal to	<=	if x <= 5
Greater than	>	if x > 5
Greater than or equal to	>=	if x >= 5

Boolean operators are used to connect and compare relationships between statements. Like an if statement, conditions can be true or false.

Boolean Operation	Operator	Example
Both conditions must be true for the statement to be true	AND	if x >= 5 AND x <= 100 Returns TRUE if x is a number between 5 and 100
Only one condition of the statement needs to be true	OR	if x == 1 OR x == 10 Returns TRUE if x is 1 or 10
If a condition is the opposite of an argument	NOT	if NOT y Returns TRUE if the y value is False

Let's look at a few Python code examples:

```

a = 1
if a == 1 or a > 10:
    print("a is either 1 or above 10")

name = "bob"
hungry = True
if name == "bob" and hungry == True:
    print("bob is hungry")
elif name == "bob" and not hungry:
    print("Bob is not hungry")
else: # If all other if conditions are not met
    print("Not sure who this is or if they are hungry")

```

Answer the questions below

Read the above section.

No answer needed

Correct Answer

11. Task 6.

Room progress (66%)

Answer the questions below

In this exercise, we will code a small application that calculates and outputs the shipping cost for a customer based on how much they've spent.

In the code editor, click on the "shipping.py" tab and follow the instructions to complete this task.

No answer needed

Correct Answer

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.

THM{IF_STATEMENT_SHIPPING}

Correct Answer

Hint

In shipping.py, on line 15 (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.

THM{IF_STATEMENT_SHIPPING}

Submit

script.py

flag.txt

Run

Woop woop! Your answer is correct

```

12 customer_basket_cost = 34
13 customer_basket_weight = 10
14
15 # Write if statement here to calculate the total cost
16 if customer_basket_cost >= 100:
17     print('Free shipping')
18 else:
19     shipping_cost = customer_basket_weight * shipping_cost_perkg
20 print (customer_basket_cost + shipping_cost)
21
22
23

```

Exercise Complete! The flag is: THM{IF_STATEMENT_SHIPPING}

Python code output

86.8

Room progress (72%)

Answer the questions below

In this exercise, we will code a small application that calculates and outputs the shipping cost for a customer based on how much they've spent.

In the code editor, click on the "shipping.py" tab and follow the instructions to complete this task.

No answer needed ✓ Correct Answer

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.

THM[IF_STATEMENT_SHIPPING] ✓ Correct Answer Hint

In shipping.py, on line 15 (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.

THM[MY_FIRST_APP] ✓ Correct Answer

script.py flag.txt

Woop woopl! Your answer is correct

```

14
15 # Write if statement here to calculate the total cost
16 if customer_basket_cost >= 100:
17     print("Free shipping")
18 else:
19     shipping_cost = customer_basket_weight * shipping_cost_perkg
20     customer_basket_cost = 101
21 print ("Customer total basket cost" +
22       str(customer_basket_cost))
23
24
25

```

Exercise Complete! The flag is: THM[MY_FIRST_APP]

Python code output

Customer total basket cost101

12. Task 7.

Room progress (77%)

This for loop shown in the code block above, will run 3 times, outputting each website in the list. Let's break this down:

- The list variable called websites is storing 3 elements
- The loop iterates through each element, printing out the element
- The program stops looping when it's been through each element in the loop

To give a real-world scenario, you could create a program that checks if a website is online or if an item is in stock. You would loop through the website list, add functionality inside the loop to check the website, and output the results. The "Python for Pentesters" room shows you how to use Python to enumerate a target, build a keylogger, scan a network, and more.

In Python, we can also iterate through a range of numbers using the range function. Below is some example Python code that will print the numbers from 0 to 4. In programming, 0 is often the starting number, so counting to 5 is 0 to 4 (but has 5 numbers: 0, 1, 2, 3, and 4)

```

for i in range(5):
    print(i)

```

Answer the questions below

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

THM[LOOPS_WHILE_FOR] ✓ Correct Answer Hint

script.py flag.txt

Woop woopl! Your answer is correct

```

1 # Write your python code
2
3 websites = ["facebook.com", "google.com", "amazon.com"]
4 for i in range(51):
5     print(i)
6
7
8
9
10
11
12

```

Exercise Complete! The flag is: THM[LOOPS_WHILE_FOR]

Python code output

0
1
2
3
4
5
6
7
8
9
10
11
12

Activate Windows
Go to Settings to activate Windows.

THMAttackBox Python Coder

13. Task 8.

Room progress (88%)

Answer the questions below

You've invested in Bitcoin and want to write a program that tells you when the value of Bitcoin falls below a particular value in dollars.

In the code editor, click on the bitcoin.py tab. Write a function called **bitcoinToUSD** with two parameters: **bitcoin_amount**, the amount of Bitcoin you own, and **bitcoin_value_usd**, the value of bitcoin in USD. The function should return **usd_value**, which is your bitcoin value in USD (to calculate this, in the function, you times bitcoin_amount variable by bitcoin_value_usd variable and return the value). The start of the function should look like this:

```

def bitcoinToUSD(bitcoin_amount, bitcoin_value_usd):

```

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).

THM[BITCOIN_INVESTOR] ✓ Correct Answer Hint

1 Bitcoin is now worth \$24,000. In the code editor on line 14, update the bitcoin_to_usd variable value to 24000 and see if your Python program recognises that your investment is below the \$30,000 threshold.

No answer needed ✓ Correct Answer

script.py flag.txt

Woop woopl! Your answer is correct

Woop woopl! Your answer is correct

```

16 # 1) write a function to
17 def bitcoinToUSD(bitcoin_amount, bitcoin_value_usd):
18     usd_value = bitcoin_am
19     return usd_value
20 # 2) use function to calculate if the investment is below $30,000
21 investment_in_usd = bitcoinToUSD(investment_in_bitcoin, bitcoin_to_usd)
22
23 if investment_in_usd <= 30000:
24     print("Your bitcoin investment is below $30,000!")
25 else:
26     print("Your bitcoin investment is above $30,000!")
27

```

Exercise Complete! The flag is: THM[BITCOIN_INVESTOR]

Python code output

Your bitcoin investment is above \$30,000!

Activate Windows
Go to Settings to activate Windows.

THMAttackBox Python Coder

14. Task 9.

Room progress (94%)

useful if you have a list where each item is on a new line. In the example above, the file is in the same folder as the Python script; if it were elsewhere, you would need to specify the full path of the file.

You can also create and write files. If you're writing to an existing file, you open the file first and use the "a" in the open function after the filename call (which stands for append). If you're writing to a new file, you use "w" (write) instead of "a". See the examples below for clarity:

```
f = open("demoFile1.txt", "a") # Append to an existing file
f.write("The file will include more text..")
f.close()

f = open("demoFile2.txt", "w") # Creating and writing to a new file
f.write("demoFile2 file created, with this content in!")
f.close()
```

Notice we use the close() method after writing to a file; this closes the file so no more writing to the file (within the program) can occur.

Answer the questions below

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

THM{FILE_R3AD}

✓ Correct Answer

script.py

flag.txt

Woop woop! Your answer is correct

```
1 # Write your python code
2 f = open("flag.txt", "r")
3 print(f.read())
4
5
6
7
8
9
10
11
12
```

Python code output

THM{FILE_R3AD}

Activate Windows
Go to Settings to activate Windows.

15. Task 10.

Room completed (100%)

Task 10 Imports

In Python, we can import libraries, which are a collection of files that contain functions. Think of importing a library as importing functions you can use that have been already written for you. For example, there is a "date" library that gives you access to hundreds of different functions for anything date and time-related.

```
import datetime
current_time = datetime.datetime.now()
print(current_time)
```

We import other libraries using the **import** keyword. Then in Python, we use that import's library name to reference its functions. In the example above, we import datetime, then access the .now() method by calling library_name.method_name(). Copy and paste the example above into the code editor.

Here are some popular libraries you may find useful in scripting as a pentester:

- Request - simple HTTP library.
- Scapy - send, sniff, dissect and forge network packets
- Pwntools - a CTF & exploit development library.

Many of these libraries are already built into the programming language; however, libraries written by other programmers not already installed in your machine can be installed using an application called pip, which is Python's package manager. Let's say you want to install the "scapy" library (which allows you to craft your own packets in code and send them to other machines); you install it first by running the command **pip install scapy**, after which in your program you can now import the scapy library.

Answer the questions below

Read the task and run the Python example code above in the code editor on the right.

No answer needed

✓ Correct Answer

Activate Windows
Go to Settings to activate Windows.

16. Maka selesai sudah room "Phyton Basic"

Woop woop! Your answer is correct



Congratulations on completing Python Basics!!! 🎉

Points earned
88

Completed tasks
10

Room type
Walkthrough

Difficulty
Easy

Streak
1

Leave Feedback

Next
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