

**RECAP FREE ROADMAP DARI FUNDAMENTAL  
SKILLS : PYTHON BASICS DAN COMMON ATTACK**

**Untuk memenuhi tugas dari  
Keamanan Sistem dan Jaringan Komputer**

**Oleh:**

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## Phyton Basics

### Praktikum : membuat kode sederhana

Step :

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

Output :

```
Exercise Completed The flag is: THM{PRINT_STATEMENTS}  
Python code output  
hello world
```

Question :

Answer the questions below

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

THM{PRINT\_STATEMENTS}

✓ Correct Answer

💡 Hint

## Praktikum : membuat operator

Step :

```
1 # Write your python code here
2 print(21+43)
3 print(142-52)
4 print(10+342)
5 print(5**2)
```

Output :

```
Exercise Complete! The flag is: THM{ADDITION}

Python code output:

64
90
352
25
```

Question :

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

## Praktikum : Variabel data Types

Step :



```

1 # Write your python code here
2
3 height = 200
4 height = height + 50
5 print(height)
6

```

---

Output :

---

**Resource Completed! This flag is:** `RESOURCE_COMPLETED`

Python code output

250

Question :

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[VARIABLE35]

✓ Correct Answer

## Praktikum : Shipping project introduction to if statement

Steps :

1. Kode 1

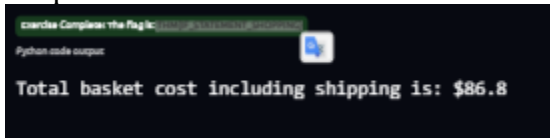
```
11 customer_basket_cost = 34
12 customer_basket_weight = 44
13 shipping_cost_per_kg = 1.20
14 free_shipping_threshold = 100
15
16 # Hitung total biaya
17 if customer_basket_cost >= free_shipping_threshold:
18     print("Free shipping")
19     total_cost = customer_basket_cost
20 else:
21     shipping_cost = customer_basket_weight * shipping_cost_per_kg
22     total_cost = customer_basket_cost + shipping_cost
23
24 print("Total basket cost including shipping is: $" + str(total_cost))
25
```

2. Kode 2

```
13 # Harga barang dalam keranjang belanja
14 customer_basket_cost = 101
15 customer_basket_weight = 44
16 shipping_cost_per_kg = 1.20 # Biaya pengiriman per kg
17 free_shipping_threshold = 100 # Ambang batas untuk gratis pengiriman
18
19 # Hitung total biaya
20 if customer_basket_cost >= free_shipping_threshold:
21     print("Free shipping")
22     total_cost = customer_basket_cost # Tanpa biaya pengiriman
23 else:
24     shipping_cost = customer_basket_weight * shipping_cost_per_kg
25     total_cost = customer_basket_cost + shipping_cost
26
27 print("Total basket cost including shipping is: $" + str(total_cost))
```

Output :

1. Output kode 1

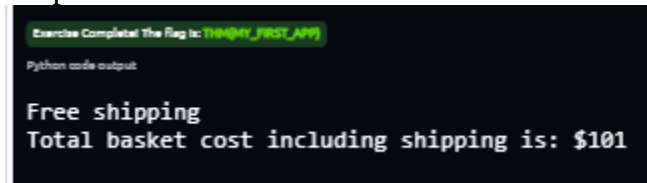


Exercise Completed The Flag is: **THINKY\_FIRST\_APP**

Python code output:

Total basket cost including shipping is: \$86.8

2. Output kode 2



Exercise Completed The Flag is: **THINKY\_FIRST\_APP**

Python code output:

Free shipping  
Total basket cost including shipping is: \$101

Question :

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\_SHOPPING]

✓ Correct Answer

🔗 Hint

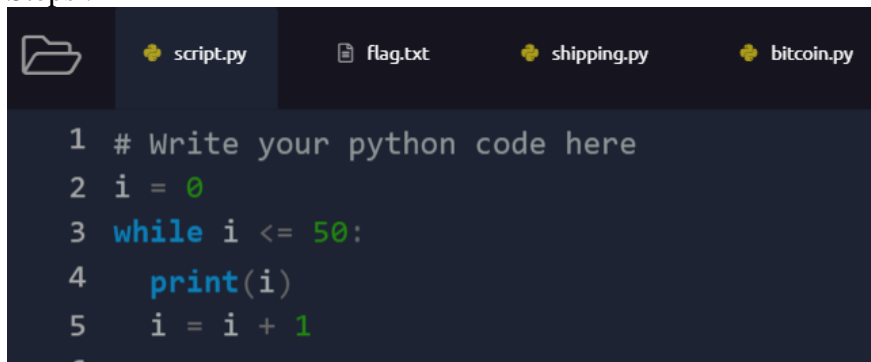
In shipping.py, on line 15 (when using the Code Editor's Hint), change the **customer\_basket\_cost** variable to **101** and re-run your code. You will get a flag (if the total cost is correct based on your code); the flag is the answer to this question.

THM[MY\_FIRST\_APP]

✓ Correct Answer

## Praktikum : Loop

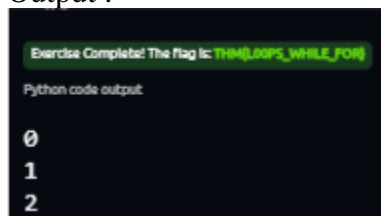
Steps :



The screenshot shows a code editor with a dark background. At the top, there is a file explorer bar with four files: 'script.py' (selected), 'flag.txt', 'shipping.py', and 'bitcoin.py'. Below the file bar, the code for 'script.py' is displayed. It consists of five lines of Python code, with line numbers 1 through 5 on the left. The code is a while loop that prints the value of 'i' from 0 to 50 in increments of 1.

```
1 # Write your python code here
2 i = 0
3 while i <= 50:
4     print(i)
5     i = i + 1
```

Output :



The screenshot shows the output of the Python code. At the top, a green banner reads 'Exercise Completed! The flag is: THM{LOOPS\_WHILE\_FOR}'. Below this, the text 'Python code output:' is displayed. The output shows the first three lines of the loop: 0, 1, and 2, each on a new line.

```
0
1
2
```

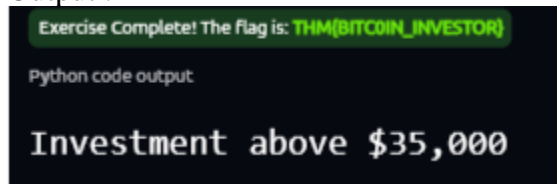


## Praktikum : Bitcoin project

Steps :

```
14 investment_in_bitcoin = 1.5
15 bitcoin_to_usd = 25000
16
17 def bitcoinToUSD(bitcoin_amount, bitcoin_value_usd):
18     usd_value = bitcoin_amount * bitcoin_value_usd
19     return usd_value
20
21 investment_in_usd = bitcoinToUSD(investment_in_bitcoin, bitcoin_to_usd)
22
23 if investment_in_usd <= 35000:
24     print("Investment below $35,000! SELL!")
25 else:
26     print("Investment above $35,000")
27
```

Output :



Question :

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

## Praktikum : Files

### Question :

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_READ}
```

✓ Correct Answer



Congratulations on completing Python Basics!!! 🎉

Points earned

🔥 88

Completed tasks

📋 10

Room type

👤 Walkthrough

Difficulty

📶 Easy

Streak

🔥 1



## 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.

📶 Easy ⌚ 80 min

🔗 Share your achievement

🖨 Start AttackBox

🆘 Help

💾 Save Room

👍 2145



⚙ Options

Room completed ( 100% )

Task 1 Introduction to Python

Task 2 Hello World

Task 3 Mathematical Operators

Task 4 Variables and Data Types

Task 5 Logical and Boolean Operators

Task 6 Introduction to If Statements

Task 7 Loops

Task 8 Introduction to Functions

Task 9 Files

Task 10 Imports

## Common Attack

### Task 2 : Rekayasa Sosial

Answer the questions below

Read the task information and watch the attached videos

No answer needed

✓ Correct Answer

What was the original target of Stuxnet?

The Iran Nuclear Programme

✓ Correct Answer

🔍 Hint

### Task 3 : Common attack social engginering :Phising

Answer the questions below

Click the green "View Site" button at the top of this task if you haven't already done so.

No answer needed

✓ Correct Answer

The static site will display a series of emails and text messages. You will be asked to identify which of these messages are genuine and which are phishing attempts. Once you have successfully identified all of the messages you will be presented with a flag to enter, here.

Good luck!

What is the flag?

THM[I\_CAUGHT\_ALL\_THE\_PHISH]

✓ Correct Answer

### Task 4 : Common attack malware and ransomware

Answer the questions below

[Research] What currency did the Wannacry attackers request payment in?

Bitcoin

✓ Correct Answer

## Task 5 : Common attack password and authentication

Answer the questions below

Put yourself in the shoes of a malicious hacker. You have managed to dump the password database for an online service, but you still have to crack those hashes!

Click the green button at the start of the task to deploy the interactive hash brute-forcer!

No answer needed

✓ Correct Answer

Based on the content of the website, you have generated a list of likely passwords, which is as follows:

```
TryH@ckMe
TryHackMe123
THM123456
qwertyuiop123
TryHackMe2021
TryHackMe123!
TryHackMe345
TryHackM3!
```

Copy the list of passwords into the "Password List" field of the hash cracker, then click "Go"!

No answer needed

✓ Correct Answer

Look at the "Current Word / Hash" section of the hash cracker.

Notice that for each word in the list you entered, the cracker is creating an MD5 hash of the word then comparing it to the Target Hash. If the two hashes match then the password has been found!

The hash cracker should find the password that matches the target hash very quickly.

What is the password?

TryHackMe123!

✓ Correct Answer

This is a very simple, browser-based example; however, in reality local hash cracking with a wordlist isn't any more complex from a high-level perspective — it's the same technique, but with a lot more potential passwords!

Hopefully this example illustrates why it is so important to choose a strong password — even if the passwords are hashed appropriately.

In the next task we will look at some of the common account protection measures, as well as how to generate secure passwords.

No answer needed

✓ Correct Answer


## Task 6 : Staying safe multi factor authentication and password managers

Answer the questions below

Where you have the option, which should you use as a second authentication factor between SMS based TOTP or Authenticator App based TOTP (SMS or App)?

App

✓ Correct Answer



# Common Attacks

With practical exercises see how common attacks occur, and improve your cyber hygiene to stay safer online.

📶 Easy ⌚ 40 min

[Share your achievement](#)[Badge](#)[Help](#)[Save Room](#)

👍 2284👤

[Options](#)

Room completed ( 100% )

- Task 1

Information

Introduction

▼
- Task 2

Common Attacks

Social Engineering

▼
- Task 3

Common Attacks

Social Engineering: Phishing

📁 ▼
- Task 4

Common Attacks

Malware and Ransomware

▼
- Task 5

Common Attacks

Passwords and Authentication

📁 ▼
- Task 6

Staying Safe

Multi-Factor Authentication and Password Managers

▼
- Task 7

Staying Safe

Public Network Safety

📁 ▼
- Task 8

Staying Safe

Backups

▼
- Task 9

Staying Safe

Updates and Patches

▼
- Task 10

Information

Conclusion

▼