

Lab Assignment & Solution



Cybersecurity Professional Program
Introduction to Python
for Security

Functions

PY-05-LS4

Main Identification

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Note: Solutions for the instructor are shown inside the green box.



Lab Objective

Understand the value of the `__main__` variable and how to use it in code.



Lab Mission

Prepare a program that executes only if its main file is run directly.



Lab Duration

15–25 minutes



Requirements

- Basic knowledge of Python



Resources

- Environment & Tools
 - Windows or Linux
 - PyCharm
 - Python 3



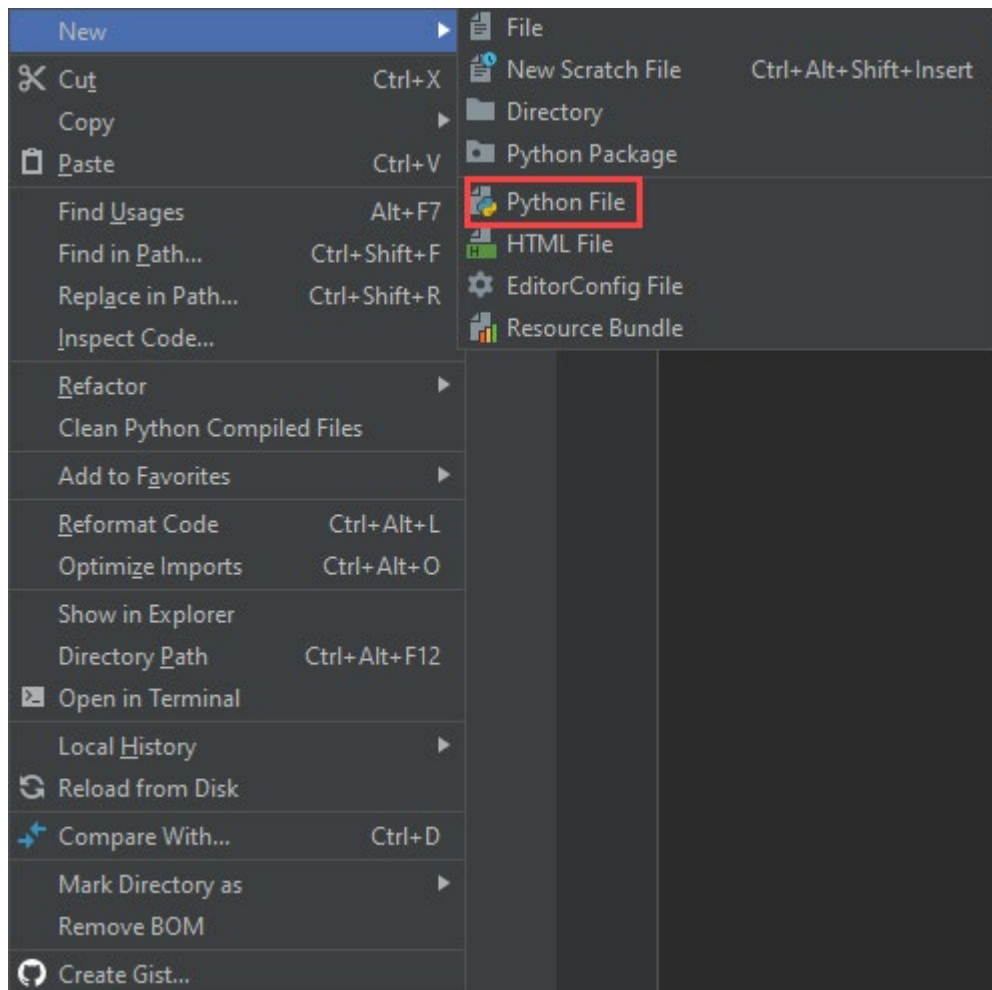
Textbook References

- Chapter 5: Functions
 - Section 2: Code Handling

Lab Task: Main Identification

Execute a Python file by checking if it is directly executed, and understand the mechanism.

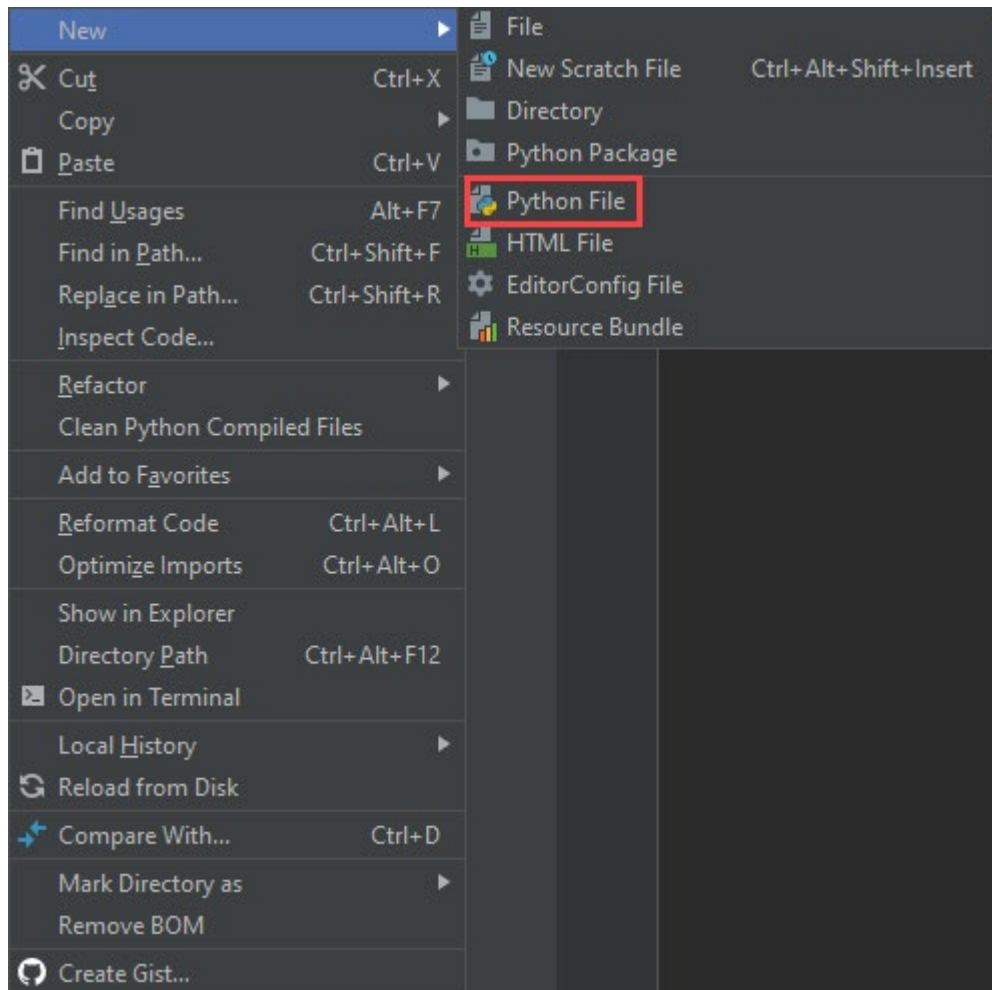
- 1 Create a new Python file in PyCharm by right clicking the project you created and selecting **New > Python File**. Name this file **message.py**.



- 2 Define a new function that prints the file name in **message.py**.

```
def main():  
    print("Hello from:", __name__)
```

- 3 Create a second Python file in PyCharm by right clicking the project you created and selecting **New > Python File**.



- 4 Import to the file the previous file.

```
import message
```

- 5 Create a new function.

```
def main():
```

- 6 Within the function, invoke the main function of the imported file.

```
def main():  
    message.main()
```

- 7 Outside of the function, create a condition that checks if the current file is directly executed.

```
if __name__ == '__main__':
```

- 8 Within the condition, print the name of the file and invoke the main function of the file.

```
if __name__ == '__main__':  
    print(__name__)  
    main()
```

- 9 Run the file.