

Chapter 48 - Module

Theory:

Modules organize code into reusable components.

Code Example:

```
# What is __name__?
# __name__ is a built-in special variable in Python.
# It holds a string value:
# If the script is being run directly, __name__ == "__main__"
# If the script is being imported, __name__ == "module_name"
# ■ Why use if __name__ == "__main__"?
# It prevents code from running when the module is imported somewhere else.
# ■ Think of it like:
# "Only run this block of code if you're running this file directly. Don't run it if it's
being imported."
# Common Uses:
# Testing code inside a file
# Avoid running unnecessary code when importing
# Structuring large applications
def myFunc():
    print("hello world")
myFunc()
print(__name__)
if __name__ == "__main__":
    #if this code directly executed by running the file its present in
    print("we are run code directly")
    myFunc()
print(__name__)
```