Class 04 Assignment - March 17, 2025

Assignment:

- Lesson 08: Control Modules & Functions
- Lesson 09: Exception Handling
- Lesson 10: File Handling
- Lesson 11: Math & DateTime Calendar

Filename: control_modules_functions.py

Function definition

```
def greet(name):
    return f"Hello, {name}! Welcome to Python programming."

# Using the function
greeting = greet("Waqar")
print(greeting)
```

Filename: exception_handling.py

Try-Except block example

```
def divide_numbers(a, b):
    try:
        result = a / b
    except ZeroDivisionError:
        return "Error: Cannot divide by zero."
    else:
        return f"Result: {result}"

print(divide_numbers(10, 2))
print(divide_numbers(10, 0))
```

Filename: file_handling.py

```
with open("example.txt", "w") as file:
    file.write("This is a sample text written to a file.")
# Reading from a file
with open("example.txt", "r") as file:
    content = file.read()
    print("File Content:", content)
```

Filename: math_datetime_calendar.py

```
import math
import datetime
import calendar

# Math example
print("Square root of 64 is:", math.sqrt(64))

# DateTime example
now = datetime.datetime.now()
print("Current date and time:", now)

# Calendar example
print("\nCalendar for March 2025:")
print(calendar.month(2025, 3))
```