

Assignment: Python Program Structure & Tokens

 Module: Python Program Structure & Tokens

 Objective:

To practice writing simple Python programs demonstrating structure, comments, imports, keywords, identifiers, and basic tokens.

By completing this assignment, learners will:

- Understand how a Python program is structured
- Use comments properly
- Work with identifiers, keywords, literals, operators
- Write simple programs confidently

Assignment Tasks

Q1. Program Structure Practice

Create a Python program with the following structure:

```
# Import section  
# Variable declaration  
# Computation / Logic  
# Output
```

 Example Output:

Sum of a and b is: 15

Q2. Comments

Write a Python script that contains:

- One single-line comment
- One multi-line comment
- A print statement displaying a message

 Example Output:

This is an example of using comments in Python

Q3. Import Statements

Import the math module and display:

- Square root of 25
- Value of π (pi)

 Example Output:

Square root of 25 is 5.0

Value of pi is 3.141592653589793

Q4. Keywords

Write a Python program that prints all Python keywords using the keyword module.

 Hint:

```
import keyword  
print(keyword.kwlist)
```

Q5. Identifiers

Create three valid identifiers and one invalid identifier.

Explain in comments why the invalid one causes an error.

 Example:

```
student_name = 'John'  
_age = 25  
rollNo123 = 101  
# 123name = 'Invalid' # ❌ Starts with a number
```

Q6. Tokens

Write a program demonstrating all 5 types of tokens:

- Keywords
- Identifiers
- Literals
- Operators
- Punctuators

 Example Output:

Result of 5 + 3 is 8

Q7. Practical Mini Task

Write a small program using:

- Two variables
- Arithmetic operation
- Display result with meaningful message

 Example Output:

Total cost is 2500.0

Bonus Challenge

Write a Python program that:

- Imports datetime
- Prints today's date and current time in a readable format

 Example Output:

Today's date is: 2025-09-27

Current time is: 20:15:34