

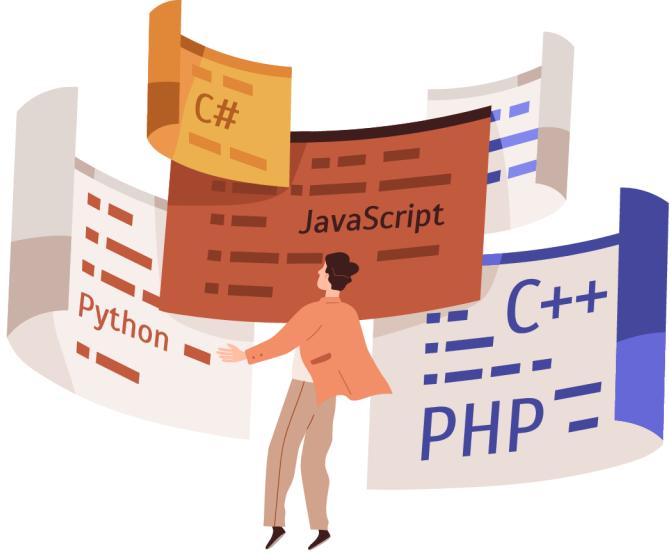


```
    return IStatus();
status = SZ;

// read response
DWORD bufrd = 0;
do {
    BYTE respp[8192 + 1];
    memset(respp, 0, _countof(respp));
    bufrd = 0;
    if(!_api->api_InternetReadFile(
        h, (LPVOID)respp,
        1, &bufrd)) {
```

# Agenda

- **Session 1:** 1) History & Introduction  
2) Variables & Its Rule
- **Session 2:** 1) Data Types: Numeric, Sequence, Boolean, Set, Dict
- **Session 3:** 1) Operators: Arithmetic, Logical, Assignment, Comparison, Membership, Identity, Bitwise
- **Session 4:** 1) Loops in Python: For, While 2) Conditional Statements: if, Elif, else 3) Control Statements: break, continue, pass
- **Session 5:** 1) Functions: Built-in, User-defined, Anonymous and Recursive
- **Session 6-7:** 1) Object-Oriented Programming: Class, Object, Inheritance, Abstraction, Polymorphism, Encapsulation
- **Session 8:** 1) File Handling 2) Exception Handling
- **Session 9:** 1) Regular Expressions 2) GUI
- **Session 10:** Interview Questions



# History of Python

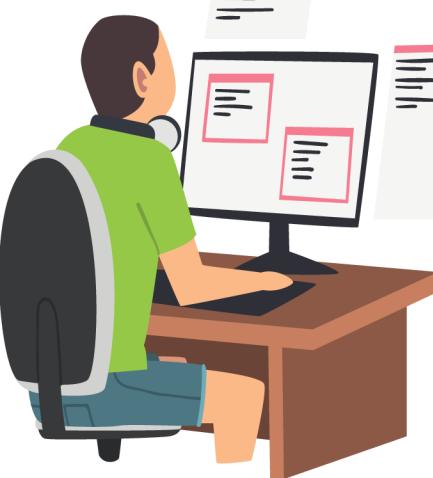
- Developed by **Guido van Rossum** in the late 1980s at Centrum Wiskunde & Informatica (**CWI**) in the Netherlands.
- Python 1.0 was released in 1991.
- Named after Monty Python's Flying Circus.
- Python 2.0 was released in 2000, followed by Python 3.0 in 2008, which is not backward-compatible with Python 2.x.
- Python 2.x support ended in 2020, and Python 3.x has since become the primary focus.
- Continuously evolving with regular updates and enhancements.

# Introduction to Python



- **General-Purpose Language:** Python is a high-level, interpreted, and general-purpose programming language.
- **Readability:** Emphasizes code readability with its clear and expressive syntax, making it easier to write and understand.
- **Interpreted:** Python code is executed line by line by the Python interpreter, allowing for quick development and debugging.
- **Dynamic Typing:** Variables in Python are dynamically typed, meaning you don't need to declare the type of a variable when you define it.

# Introduction to Python



- **Highly Portable:** Python runs on various platforms including Windows, macOS, Linux, Unix, etc., making it highly portable.
- **Vast Ecosystem:** Python boasts a vast ecosystem of libraries and frameworks for various purposes such as web development, data analysis, machine learning, and more.
- **Open Source:** Python is open-source, meaning its source code is freely available and can be modified and redistributed.
- **Popular Applications:** Widely used in web development (Django, Flask), scientific computing (NumPy, SciPy), data analysis (Pandas), machine learning (TensorFlow, PyTorch), automation, scripting, etc.

# Variables & It's rules

- **Definition:** Variables are containers used to store data values in Python.
- **Dynamic Typing:** Python is dynamically typed, meaning you don't need to declare the type of a variable when you define it.
- **Naming Rules:**
  - Must start with a letter (a-z, A-Z) or underscore (\_).
  - Can be followed by letters, digits (0-9), or underscores.
  - Case-sensitive (myVar and myvar are different variables).
- **Data Types:** Variables can hold different data types:
  - Numbers (integers, floats)
  - Strings (text)
  - Booleans (True/False)
  - Lists, tuples, dictionaries, etc.
- **No Declaration:** Variables are created the moment they are first assigned a value.
- **Reassignment:** Variables can be reassigned to different values.
- **Scope:** Variables have scope, i.e., the region where they are recognized. Local variables are accessible only within the function or block where they are defined, while global variables are accessible throughout the program.