1. What is Python?

Python is a high-level, interpreted language used for web development, automation, data science, and scripting due to its simplicity and flexibility.

2. What is a variable?

A variable stores data in memory, allowing programs to reuse, modify, and process values efficiently throughout code execution based on assigned names.

3. What is a function?

A function is a reusable code block that performs specific tasks, improving structure, reducing repetition, and enabling cleaner, modular program design.

4. What is a list?

A list is a mutable sequence storing multiple items, supporting indexing, iteration, appending, removing, and powerful built-in operations in Python.

5. What is a tuple?

A tuple is an immutable ordered collection that stores multiple values safely, preventing accidental modification while supporting indexing and iteration operations.

6. What is a dictionary?

A dictionary stores key-value pairs, enabling fast lookups, updates, and dynamic data organization essential for structured information management in Python applications.

7. What is a string?

A string represents text data, supporting indexing, slicing, formatting, and numerous methods for manipulation within Python programs and applications.

8. What is a loop?

A loop repeatedly executes a block of code, allowing automation of tasks, iteration over data, and efficient processing of repetitive operations.

9. What is conditional statement?

A conditional statement executes different code blocks based on specific conditions, enabling decision-making and flow control in Python programs.

10. What is a class?

A class defines a blueprint for objects, supporting encapsulation, inheritance, and organized code structure in object-oriented Python programming.

11. What is an object?

An object is an instance of a class containing data and behavior, enabling modeling of real-world concepts within Python applications.

12. What is exception handling?

Exception handling manages runtime errors using try-except blocks, preventing program crashes and allowing safe recovery from unexpected situations.

13. What is a module?

A module is a Python file containing reusable functions, variables, and classes, helping organize code and improve maintainability across projects.

14. What is a package?

A package is a directory containing multiple modules with an **init**.py file, enabling structured, reusable, and organized code distribution.

15. What is list comprehension?

List comprehension provides a concise way to create lists using loops and conditions, making Python code cleaner, readable, and efficient.