**Python viva Answer**

### ✅ ****Dynamically Typed****

* This means **you don’t have to declare the data type of a variable**.
* Python determines the data type at **runtime**, not at compile-time.
* We don't declare variable types; Python decides at runtime.

### ✅ ****Strongly Typed****

* This means **Python does not automatically convert between incompatible types**.
* You **must explicitly convert types** when needed.
* It doesn’t allow automatic type conversion between incompatible types.

Absolutely! Here are **basic Python viva questions and answers** — short, clear, and ideal for quick revision:

### 🐍 ****Basic Python Viva Questions and Answers****

#### 1. ****What is Python?****

**Ans:** Python is a high-level, interpreted, and general-purpose programming language. It is known for its readability and simplicity.

#### 2. ****Who created Python?****

**Ans:** Python was created by **Guido van Rossum** in 1991.

#### 3. ****What type of language is Python?****

**Ans:** Python is **dynamically typed** and **strongly typed**.

#### 4. ****How do you write a comment in Python?****

**Ans:** Using # for single-line comments.  
Example: # This is a comment

#### 5. ****What are Python data types?****

**Ans:** Common types are: int, float, str, bool, list, tuple, set, and dict.

#### 6. ****What is a list in Python?****

**Ans:** A list is a mutable, ordered collection of items.  
Example: my\_list = [1, 2, 3]

#### 7. ****What is a tuple?****

**Ans:** A tuple is an immutable, ordered collection.  
Example: my\_tuple = (1, 2, 3)

#### 8. ****How is a dictionary different from a list?****

**Ans:** A dictionary stores data in key-value pairs, while a list stores items by index.  
Example: my\_dict = {"name": "Ashith"}

#### 9. ****What is a function in Python?****

**Ans:** A block of code that runs when called.  
Example:

def greet():

print("Hello")

#### 10. ****What is indentation in Python?****

**Ans:** Indentation defines blocks of code. Python uses whitespace instead of braces.

#### 11. ****How to take user input in Python?****

**Ans:** Using input() function.  
Example: name = input("Enter your name: ")

#### 12. ****What is type casting?****

**Ans:** Converting one data type into another.  
Example: int("5")

#### 13. ****What is the use of**** if ****statement?****

**Ans:** It is used for conditional execution.  
Example:

if x > 0:

print("Positive")

#### 14. ****What are loops in Python?****

**Ans:** Loops repeat a block of code. Python has for and while loops.

#### 15. ****What is the difference between**** break ****and**** continue****?****

**Ans:**

* break stops the loop.
* continue skips the current iteration.

#### 16. ****How do you define a class in Python?****

**Ans:**

class MyClass:

def \_\_init\_\_(self):

self.value = 0

#### 17. ****What is**** self ****in a class?****

**Ans:** self refers to the instance of the class.

#### 18. ****What is a module in Python?****

**Ans:** A file containing Python code (functions, classes, etc.). Use import to include it.

#### 19. ****What is the difference between**** is ****and**** ==****?****

**Ans:**

* == checks **value equality**
* is checks **object identity**

#### 20. ****What is the difference between**** append() ****and**** extend()****?****

**Ans:**

* append() adds a single item.
* extend() adds elements from another list.