# Level 1: Basics (Start)

## 1. **Print in Python**

We use print() function to display output.

### Example:

print("Hello, World!")

print("My name is Vijay")

print(10 + 5)

### Output:

Hello, World!

My name is Vijay

15

## 2. **Comments**

* Single-line comment → starts with #
* Multi-line → use triple quotes ''' ... ''' or """ ... """

### Example:

# This is a single-line comment

print("Python is easy")

"""

This is a

multi-line comment

"""

print("Learning step by step")

## 3. **Variables**

* Variables are used to store data.
* No need to declare type (Python is dynamic).

### Example:

name = "Vijay" # string

age = 28 # integer

height = 5.9 # float

is\_student = False # boolean

print(name, age, height, is\_student)

### Output:

Vijay 28 5.9 False

## 4. **Data Types**

Some common ones:

* int → 10
* float → 10.5
* str → "Hello"
* bool → True / False

You can check type using type().

### Example:

x = 100

y = 12.5

z = "Python"

b = True

print(type(x)) # int

print(type(y)) # float

print(type(z)) # str

print(type(b)) # bool

✅ Now Exercise for you

1. Write a Python program that:
   * Stores your name, age, and city in variables.
   * Prints them in one line like:

My name is Vijay, I am 28 years old, and I live in Nellore.

1. Check the type() of each variable and print the result.

## 5. **Operators in Python**

Python has many operators. Let’s start with the main ones:

### 1. Arithmetic Operators

a = 10

b = 3

print(a + b) # Addition → 13

print(a - b) # Subtraction → 7

print(a \* b) # Multiplication → 30

print(a / b) # Division → 3.333...

print(a // b) # Floor division → 3

print(a % b) # Modulus (remainder) → 1

print(a \*\* b) # Exponent (power) → 1000

### 2. Comparison Operators

x = 5

y = 10

print(x > y) # False

print(x < y) # True

print(x == y) # False

print(x != y) # True

### 3. Logical Operators

a = True

b = False

print(a and b) # False

print(a or b) # True

print(not a) # False

✅ Exercise for you

1. Create two variables: num1 = 15, num2 = 4.
   * Print addition, subtraction, multiplication, division, modulus, floor division, and power.
2. Write a program to check if age (your age variable) is greater than 18 and less than 60 using comparison and logical operators.

# Next Step → **Taking Input from User**

Till now, we hard-coded values. But in real-time, we usually take input from the user.

### Example:

name = input("Enter your name: ")

age = int(input("Enter your age: "))

city = input("Enter your city: ")

print(f"My name is {name}, I am {age} years old, and I live in {city}.")

👉 Note: By default, input() takes values as string.  
That’s why we use int() to convert age to an integer.

✅ Exercise for you

1. Write a Python program that asks the user for two numbers and prints:
   * Sum
   * Difference
   * Product
   * Quotient
2. Ask the user for their age, and print:
   * "You are eligible to vote" if age >= 18
   * Otherwise "You are not eligible to vote"