## What are the basic datatypes in python?

Numeric: int, float, complex

Text: str

Sequence: list, tuple, range

Mapping: dict

Set: set, frozenset

Boolean: bool

Binary: bytes, bytearray, memoryview

# What is the use of type() function in python.

The type() function in Python is used to determine the **data type** of an object or variable. It returns the type of the object passed as an argument.

## Syntax:

type(object)

• **object**: The object or variable whose type you want to check.

### **Example:**

```
1 x = 5
2 print(type(x)) # Output: <class 'int'>
3
4 y = "Hello"
5 print(type(y)) # Output: <class 'str'>
6
7 z = 3.14
8 print(type(z)) # Output: <class 'float'>
```

#### **Use Cases:**

1. **Check Data Type**: To check the type of a variable or object at runtime.

```
1 var = 10.5
2 if type(var) = float:
3 print("It's a float!")
```

- 2. **Debugging**: When debugging, you can use type() to verify the type of variables to ensure the correct data type is being used.
- 3. **Dynamic Typing**: Since Python is dynamically typed, type() can help confirm the type of an object when working with dynamically assigned variables.