

## Write an assignment on the variable and its types?

Types of Variables in Python:

### 1. Numeric Variables:

1. int: Represents integer values. Example: `x = 10`
2. float: Holds floating-point or decimal values. Example: `y = 3.14`
3. complex: Deals with complex numbers. Example: `z = 2 + 3j`

### 2. String Variables:

- str: Used for text data. Example: ``name = "John"```

### 3. Boolean Variables:

- bool: Represents Boolean values, True or False. Example: ``is valid = True``

### 4. List Variables:

- list: Holds an ordered sequence of elements. Example: ``numbers = [1, 2, 3]`

### 5. Tuple Variables:

- tuple: Like a list but immutable. Example: ``coordinates = (4, 5)`

### 6. Set Variables:

- set: Stores unique elements in an unordered manner. Example: ``unique numbers = {1, 2, 3}`

### 7. Dictionary Variables:

- dict: Holds key-value pairs. Example: ``person = {'name': 'Alice', 'age': 25}`

### 8. None Type Variable:

- None Type: Represents the absence of a value or a null value. Example: ``result = None``

### 9. Custom Class Variables:

- Custom classes: Variables can also store instances of user-defined classes. Example: ``car = Car`  
( )`

### 10. File Variables:

- File objects: Variables can represent files when using file handling operations. Example: ``file = open('example.txt', 'r')`