### **+** Comments in Python:

They are parts of the code that are not executed. They're written just to explain what the code does. It consist of 2 types namely:

• **Single-line comment**: Starts with #

Example: # This is a single-line comment

• Multi-line comment: Enclosed in "" "" or """"

Example: "This is a multi-line comment".

**★ Keywords:** They are special reserved words that have special meaning but cannot be used as identifiers.

Examples: True, False, bool, try, for, else.

- **+ Identifiers:** are the names we use to create variables, functions, classes.
- **→ Data Types:** define the type of data a variable can hold. Common ones include:

str - for text
int - for whole numbers
float - for decimal numbers
complex - for complex numbers (e.g., 3 + 4j)
bool - for True/False values

## **→** Sequence Data Types (Data Structures)

These are types of sequence data types which is used to store collections of data:

- **str** includes as String (text)
- **list** data will be stored in ordered format, (changeable)
- **tuple** Ordered, (but unchangeable)
- set data follows unordered format but includes unique items
- dict—collection of key-value pairs is considered as dictonary.

**+ Variables:** are names used to store data in a program.

#### Rules to declare variable:

```
a=2 | A=77 | num=10 | num1=7 | NUM1=45 | stud_name="dhoni" | Stu_id=64 | StuId=106
```

### Multiple variables in single line declaration:

```
a,b,c=5,6,7
x=7;y=8;z=9;
```

#### **Invalid Variable declaration:**

1num=5 | stu name="dhoni" | @num\$=8

## + Input / Output Statement:

**Input function:** The input() function is used to take input from the user as a string.

Example: name = input("Enter your name: ")

Output function: The print() function is used to display information on the screen.

Example: print("Dhoni finishes off in style!!")

# Different ways to use print() statements:

1. using .format() method: the values can be inserted into a string using curly brackets {} and .format()

```
example: id = 10
print("Employee ID = {}".format(id))
```

2. using f-strings:

```
example: id = 10
print(f"Employee ID = {id}")
```