## Assignment-1

**1) Distinguish between variable, constant and Literals with example?**

| Variable | constant | Literal |
|---|---|---|
| 1. Variable is a name of location in memory that enables us to store a value for later use. | 1. constant is like a variable. | 1. Literals are values that are assigned to variables and constants. |
| 2. Examples:- `int i = 10;` // i is a variable & it is a reserved memory location. | 2. Example:- `const int i = 10;` // 'i' is a constant, because its value cannot be changed, once defined. | 2. Examples:- `const int i=10` // '10 is a Literal. |

**2) Define Identifiers and Data types.**

**\*Identifiers:-**

Python Identifier is a name used to Identify a variable, function, class, or other object.

An Identifier starts with a letter 'A to Z' or 'a' to 'z' or an underscore (_) followed by zero or more letters, digits etc., we cannot use special symbols like !, @, #, $, % etc., It cannot start with a digit.
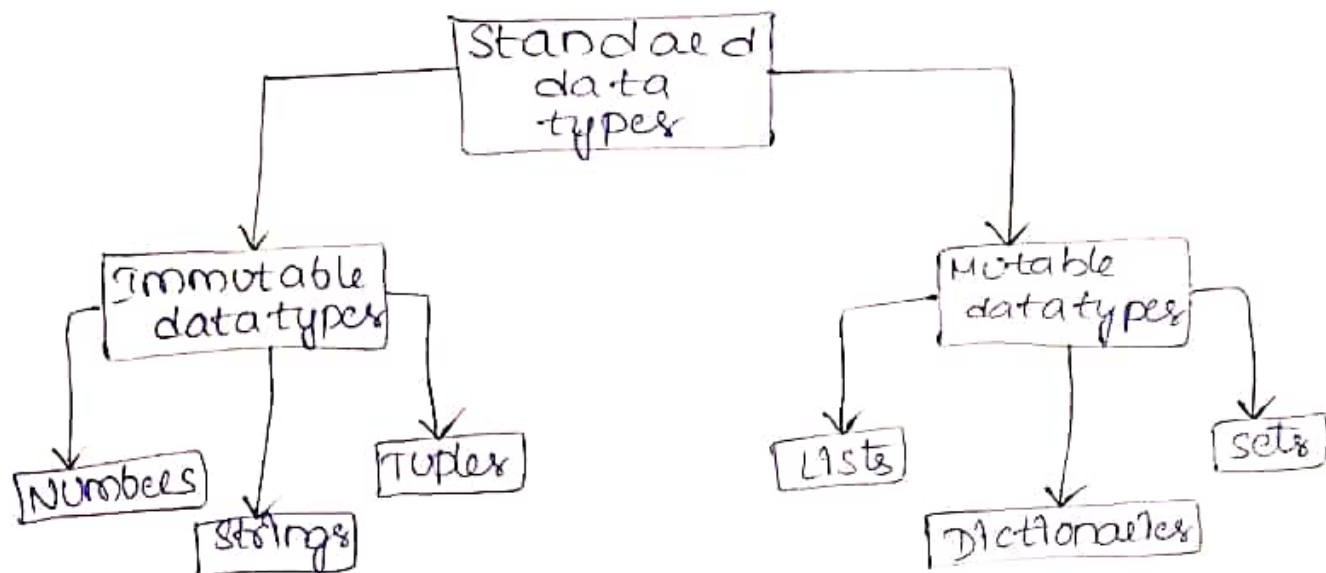
**\*Data types:-**

there are 2 types of data.

i) Primitive Data types.

ii) Non-Primitive Data types.

# Standard data types:

Standard data types
- Immutable data types
  - Numbers
  - Strings
  - Tuples
- Mutable data types
  - Lists
  - Dictionaries
  - Sets

→ Int: we use for number.

→ Char: we use for only single Alphabet.

→ Str: we use it for name & any collect of Alphabet.

→ Float: we use it for number in decimal.

→ Complex: we use it for number in alth form.

→ Double: we use for number and char inc. the size.

→ Long: we use it for number and char also it creates whole block and also inc. the size.

→ short: we use it for number

→ unsigned: we use it for number

→ signed etc: we use it for number.

③ Write a program to declare two variable, take one of them from user and determine one by self then compare and print them.

```
var1 = input("Enter any Name")
var2 = "Bhavana"
print(var2 == var1)
print(var1)
```

o/p:

case① → Enter any name: Bhavana
    True
    Bhavana.

case② → Enter any name: Prasanna
    False
    Bhavana.