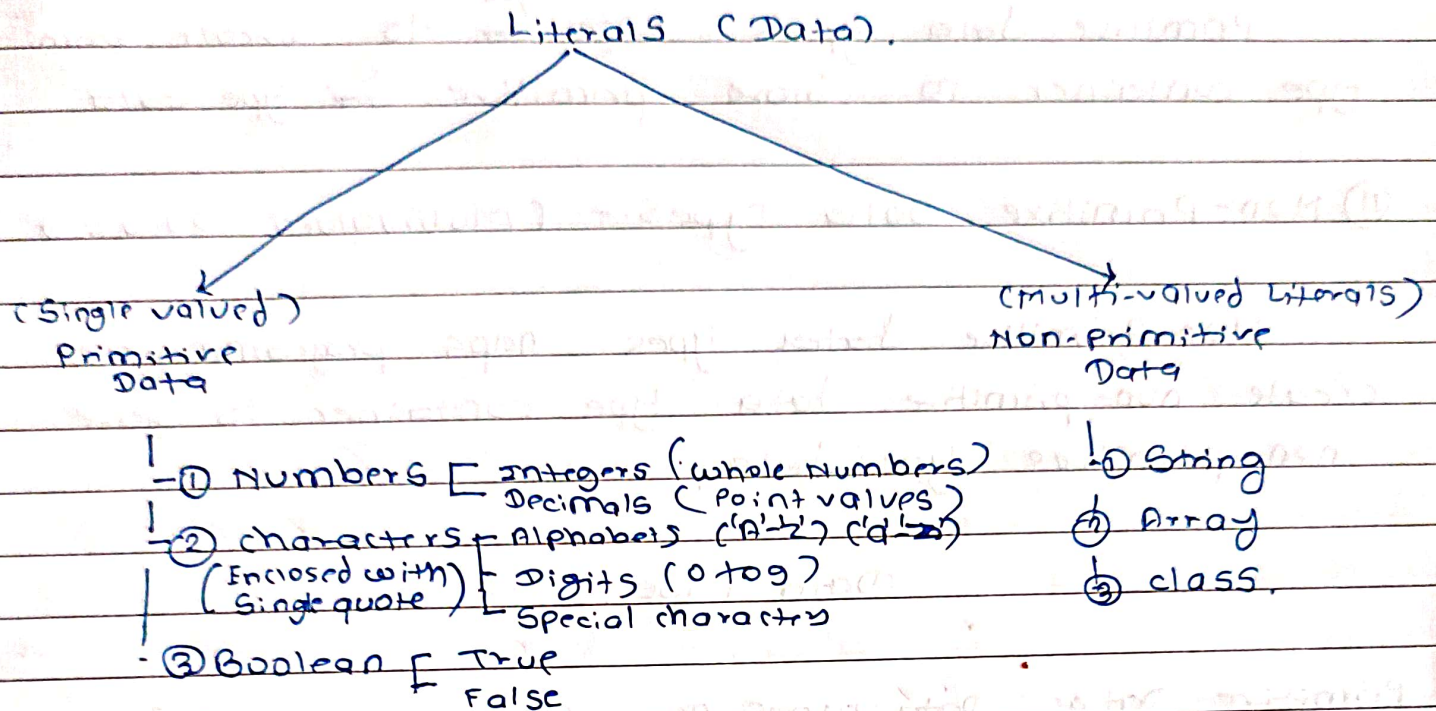


ASCII → American Standard code for Information Interchange

Literals → (written format of language). (Data)



* ASCII → American Standard code for Information Interchange

* ('A'-'Z') → ASCII value ('A' → 65 to 'Z' → 90).

* ('a'-'z') → ASCII value ('a' → 97 to 'z' → 122).

* ('0'-'9') → ASCII value ('0' → 48 to '9' → 57).

* Boolean → Logical values (True or False).

* String → Group of characters is called as String, written in double quotes.

Eg: "Hello world".

Data Types: (category of data).

Data Types helps programmer to identify and create respective containers to store that respective data.

Data Types are classified into two types:

① Primitive Data Types

② Non-Primitive Data Types.

1 bit → To store Binary '1' or Binary '0'.
 8 bit → 1 Byte → Store up to ~~255~~ 127.



① Primitive Data Types: (Single valued Data)

Programmer

Primitive data types helps ^{Programmer} us to create primitive type container to store primitive type data.

② Non-Primitive Data Types:- (Multivalued Data):→

Non-Primitive data types helps programmer to create non-primitive data type container to store non-primitive type data.

Data Type

| Primitive Data | Data Types | Memory Size | Default values |
|----------------|------------|----------------------|----------------|
| Integers | byte | 1 byte (127) | 0 |
| | Short | 2 byte (32767) | 0 |
| | int | 4 bytes (2147483647) | 0 |
| | long | 8 bytes | 0L/0l |
| Decimals | Float | 4 byte | 0.0F/0.0f |
| | Double | 8 byte | 0.0/0.00 |
| Characters | char | 2 bytes | '\00000' |
| Boolean | boolean | 1 bit | False. |

byte → 1 byte → 8 bit → 127
 short → 2 byte → 16 bit → 32767
 int → 4 byte → 32 bit → 2147483647
 long → 8 byte → 64 bit → 9223372036854775807

Why data Types? → To store data respectively according to memory consumptions