VALUES

- Values can be said as objects.
- Entities that can be used, manipulated, and produced by a computer program.
- Values can be assigned with certain variables in program for calculation, manipulation. Values look alike,
    1. ‘Hello, world!’
    2. ‘How are you?’
    3. 2
    4. 6
    5. 7.56

VARIABLES

For print(‘hello world’) hello world is considered as value which is without any assigned variable

In case of any operation or manipulation variables are needed as shown below,

1. a=2
2. b=6
3. c=7.56

here, a, b, c are said to be variables and 2, 6, 7.56 are values of variable respectively.

DATA TYPES

We have seen that values are of different types some are numbers (int) some are words (strings) but how they differ from each other, that depend on syntax.

Its uses

- groups values based on shared characteristics
- determines allowable operations (ex. Arithmetic operations for numbers but not for text)
- determines written format
    - example (ways of writing floating point numbers):
        - 3.14
        - 0.314e1

Some common Python data types:

- Integer
- Float } numeric
- Boolean } (Boolean is subtype of integer)
- String (part of sequences)

For identifying types of variables handling values in it we use type function as **type()** for example,

For int

```
>>>a=5
>>>print(type(a))
#output#
<class 'int'>
```

for string

```
>>>a='hello'
>>>print(type(a))
#output#
 <class 'str'>
```