VARIABLE DECLARATION AND DEFINITION

* VARIABLE
  + Variable is created as soon as you assign a value to it. It does not need any commands unlike other programming languages.
* VARIABLE DECLARATION
  + X = 100
  + Y = “Osama”
  + Print(X)
  + Print(Y)
* Examples
  + X = 100
  + Y = 200
  + Print(x \* y)
  + Print(x - y)
  + Print(x % y)

VARIABLE DATA TYPES

1. Numbers
   1. Integer
      1. X = 10
   2. Float
      1. X = 10.24
   3. Complex
      1. X = 25 j
2. String
   1. X = ‘hello’
   2. Y = “hello”
   3. Z = input()

Print (“here is an example”, x, y, z)

* 1. name[2] = 'd'

TypeError: 'str' object does not support item assignment

* 1. name[2:8]

‘ama’.

1. List
   1. Ordered can be changed.
   2. Duplicate entries are present.
   3. Example:

Fruits = [‘apple’, ‘kiwi’, ‘banana’]

Print(Fruits)

1. Dictionary
   1. Unordered
   2. Can be changed
   3. No duplicate entries are present
   4. Example:

Animals = {‘reptiles’:‘snake’, ‘mammals’ : ‘whale’, ‘amphibians’ : ‘frogs’}

Print(animals)

1. Tuple
   1. Ordered
   2. Cannot be changed
   3. Duplicate entries are present
   4. Example:

Animals = (‘lion’, ‘tiger’, ‘monkey’)

Print(animals)

1. Set
   1. Unordered
   2. Duplicate entries are present
   3. Example:

Animals = (‘lion’, ‘tiger’, ‘monkey’)

* 1. Print(animals)

TYPE CONVERSION

* Type conversion specifies a type to a variable
* X = (20)
* Y = (“number is”)
* Z = 20

Print (str(x\*z), y)

1. int() – This function changes any data type to integer data types.
2. float() – This function changes any data type to float data types.
3. tuple() - This function changes any data type to tuple.
4. list() - This function changes any data type to list.
5. set()- This function changes any data type to set.
6. dict() - This function changes any data type to dictionary.