Variables

Python is case sensitive

```
Print “Hello World!”
```

Assignment Operator

The most common form of statements in python is an assignment statement

An assignment statement has the following form

LHS = RHS;

This is ***NOT*** an equation!

The **=** in the middle is the **ASSIGNMENT OPERATOR**

An assignment statement performs the following task

Evaluate the **RHS** and assign that value to whatever is on the **LHS**

Assigning Values to Variables

- Python variables do not need explicit declaration to reserve memory space. The declaration happens automatically when you assign a value to a variable. The equal sign (=) is used to assign values to variables.

- The operand to the left of the = operator is the name of the variable and the operand to the right of the = operator is the value stored in the variable

Lets execute the following code.

```
counter = 100           # An integer assignment
miles   = 1000.0        # A floating point
name    = "John"        # A string

print counter
print miles
print name
```

Multiple Assignment

- Python allows you to assign a single value to several variables simultaneously. For example −

a = b = c = 1

- Here, an integer object is created with the value 1, and all three variables are assigned to the same memory location. You can also assign multiple objects to multiple variables. For example −

a,b,c = 1,2,"john“

Assigning Values to Variables

- Python has various standard data types that are used to define the operations possible on them and the storage method for each of them.

Python has five standard data types −

- Numbers
- String
- List
- Tuple
- Dictionary

Python Numbers

- Number data types store numeric values. Number objects are created when you assign a value to them. For example −

```
var1 = 1
var2 = 10
```

- You can also delete the reference to a number object by using the del statement. The syntax of the del statement is −

```
del var1[,var2[,var3[....,varN]]]]
```

- You can delete a single object or multiple objects by using the del statement. For example −

```
del var
del var_a, var_b
```

Python Numbers

- Python supports four different numerical types −
- int (signed integers)
- long (long integers, they can also be represented in octal and hexadecimal)
- float (floating point real values)
- complex (complex numbers