Input and Output Functions

* A program needs to interact with the user to accomplish the desired task
* This can be achieved by using input and output functions.

(i) Input Function : input()

(ii) output Function : print()

(i) print() function

[output]

* To display result on the screen.
* Arguments are separated by comma(,) (or) '+'

Syntax → order is important Default space \n sys.stdout

print(value(s), sep = ' ', end = '\n', file = file, flush = flush)

flush = False

value(s)

+ +

' ' = space is included automatically
+ = no space is included automatically

* ~~Data~~ data
* converted to string before printed

sep = 'separator' [optional] ← Don't put any quotes in sep parameter

* how to separate the objects, if there is more than 1.
* Default: ' '

end = 'end' [optional]

* what to print at the end
* Default: '\n'

file [optional] (not working)

* an object with a write method.
* Default: sys.stdout

flush [optional] (not working)

* A boolean, specifying if the output is flushed (True) or buffered (False)
* Default: False

Example

print(""a"") → syntax error
print("" a "") → syntax error
all other combinations are working fine

print("Hello World") → String
print(5) → Value
print("Sum =", a) → String with variable
print("Sum =" + a)
print("n1 =", a, "n2 =", b, "n3 =", c, ...)
print(3*4+9) → Expression of values
print("Hello", 123, sep = ';') → Hello;123

(i) input() function [Python 3.x]

* To accept data as input at runtime (Assigns)
* Stores the value in the variable if it is defined / declared with '=' sign.

Syntax:

```
[variable_name1 = variable_name2 = ... = variable_namen]
  = input(prompt = None, 1)
```

Prompt string:

* Statement / message to the user, to know what input can be given.
* If used, it is displayed on the screen (monitor) (like print() function) (Bound inside input() function)

* raw_input() function [Python 2.x]

* To accept exact data with its type as input whatever is typed from the keyboard
* Converts it to string and then returns it to the variable (stores in variable if it is declared).

Syntax:

```
[variable_name1 = variable_name2 = ... = variable_namen]
  = raw_input(prompt = None, 1)
```

"Prompt string"

Example: