

# Input and Output

When we say Input, it means to feed some data into a program. An input can be given in the form of a file or from the command line.

When we say Output, it means to display some data on screen, printer, or in any file.

Python provides numerous built-in functions that are readily available to us at the Python prompt. Some of the functions like `input()` and `print()` are widely used for standard input and output operations respectively.

## Output

The simplest way to produce output is using the *print* statement where you can pass zero or more expressions separated by commas. This function converts the expressions you pass into a string and writes the result to standard output.

Example	Output
<code>print "Hello Python"</code>	Hello Python
<code>print 'Hello Python'</code>	Hello Python

<code>print("Hello Python")</code>	Hello Python
<code>print('Hello Python')</code>	Hello Python
<code>a=10</code>	value of a is 10
<code>print "value of a is", a</code>	('value of a is', 10)
<code>print("value of a is",a)</code>	

## Output formatting

Sometimes we would like to format our output to make it look attractive. This can be done by using the `str.format()` method. This method is visible to any string object.

Example	Output
<code>a = 10; b=20</code> <code>print('The value of a and b is {0},{1}'.format(a,b))</code>	The value of a and b is 10, 20

Here the curly braces `{ }` are used as placeholders. We can specify the order in which it is printed by using numbers (tuple index).

We can even format strings like in C programming language. We use the % operator to accomplish this.

Example	Output
<pre>a = 10; b=20 print('The value of a and b is %d,%d'%(a,b))</pre>	The value of a and b is 10,20

## Input

To allow flexibility we might want to take the input from the user. In Python, we have the input() function to allow this.

## Syntax

<pre>input([message])</pre>
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Where message is the string we wish to display on the screen. It is optional.

Example	Output
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a=input('Enter value of a')	Enter value of a 10
print 'Value of a is',a	Value of a is 10

Example	Output
a=input('Enter value of a')	Enter value of a 10
print 'Value of a is %d' %a	Value of a is 10

## raw\_input

raw\_input() function is used to take input from the user. It takes the input from the Standard input in the form of a string and reads the data from a line at once.

Example	Output
a=raw_input("Enter Value of a")	Enter Value of a 10
print "Value of a is",a;;	Value of a is 10

Example	Output
a=raw_input("Enter Text")	Enter Text Hello Python
print "Entered Text is",a	Entered Text is Hello Python