

# MORE ON PYTHON

CLASS VII

CH-6 PERIOD -2

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**CHANGING YOUR TOMORROW**

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# OUTCOME OF THE CLASS

- *Use of interpreter*
- *Using printf()*
- *Using IDE as Calculator*
- *Variables in python*

# Use of Interpreter

- In the interactive mode of Python, the commands are executed line by line.
- When you type a command next to the python prompt (`>>>`) and press the Enter key, the Interpreter converts the command into machine language.
- After processing, the Interpreter again converts the machine code into human readable form (output).

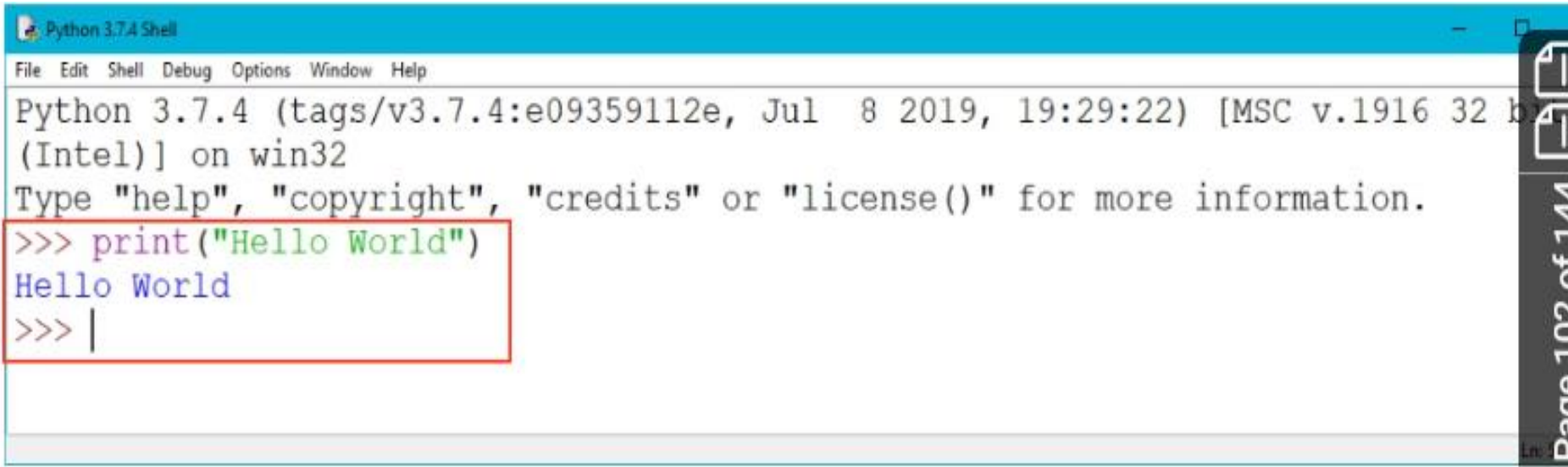
# Using print() function

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The print() function is used to display the output of any command on the screen. It can also be used to print the specified messages.

For example:

**>>>print ("Hello World") will display Hello World**

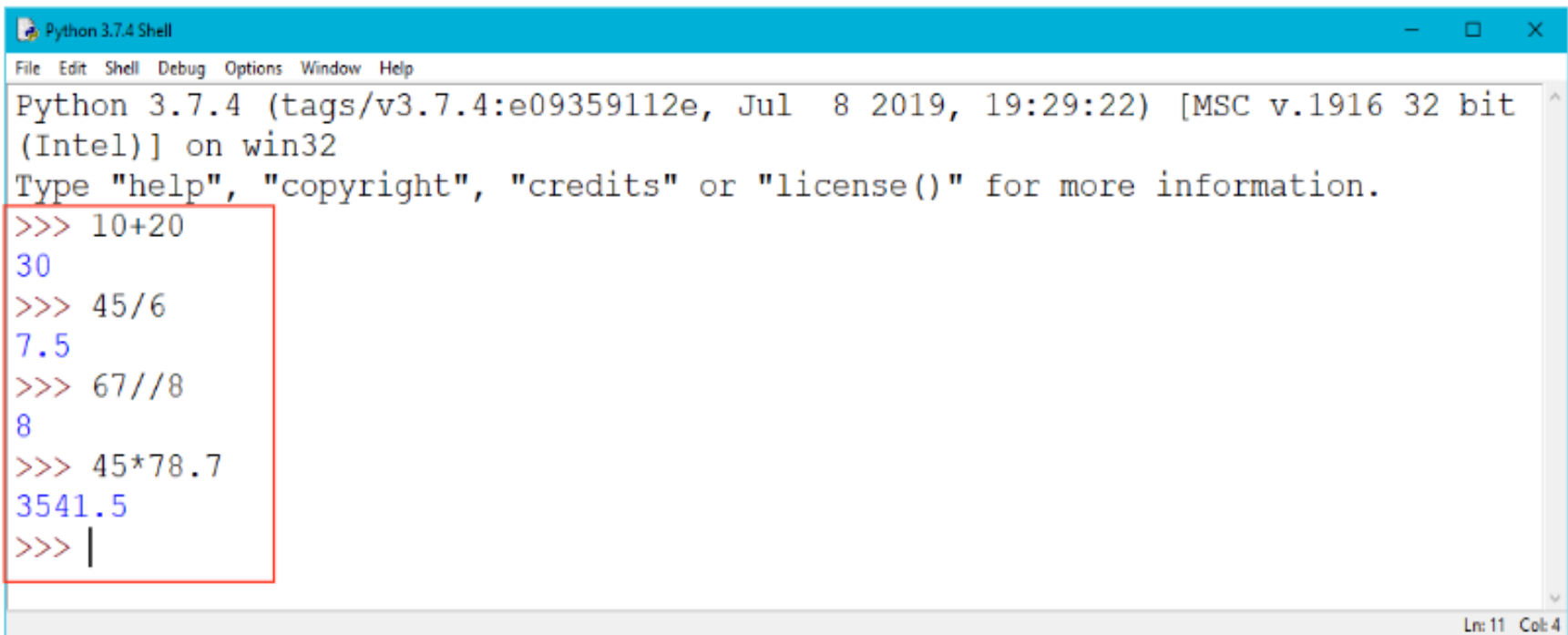


```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916 32 b
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> print("Hello World")
Hello World
>>> |
```

# USING ID AS CALCULATOR

## Using IDLE as a calculator

To evaluate an arithmetic expression, it is not necessary to use the `print()` function. If you type an arithmetic expression at the Python prompt and press the **Enter** key, the interpreter automatically evaluates it and shows the result. In this case, the interpreter acts as a simple calculator. The expressions are evaluated using operators like `+`, `-`, `*`, `/`, etc. The basic **BODMAS** rules are followed for performing calculations. For example:



```
Python 3.7.4 Shell
File Edit Shell Debug Options Window Help
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul  8 2019, 19:29:22) [MSC v.1916 32 bit
(Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> 10+20
30
>>> 45/6
7.5
>>> 67//8
8
>>> 45*78.7
3541.5
>>> |
```

The screenshot shows a Python 3.7.4 Shell window. The title bar is blue and says "Python 3.7.4 Shell". The menu bar includes "File", "Edit", "Shell", "Debug", "Options", "Window", and "Help". The main text area shows the Python version and build information, followed by a prompt for help. A red box highlights the following input and output:

```
>>> 10+20
30
>>> 45/6
7.5
>>> 67//8
8
>>> 45*78.7
3541.5
>>> |
```

The status bar at the bottom right shows "Ln: 11 Col: 4".

# Working in a Script mode

For writing lengthy programs in Python, Script mode is used. Using this mode, we can create and edit Python programs. In this mode, we can save our file so that it can be used later. The complete script is written in an editor, such as a Notepad in Windows.

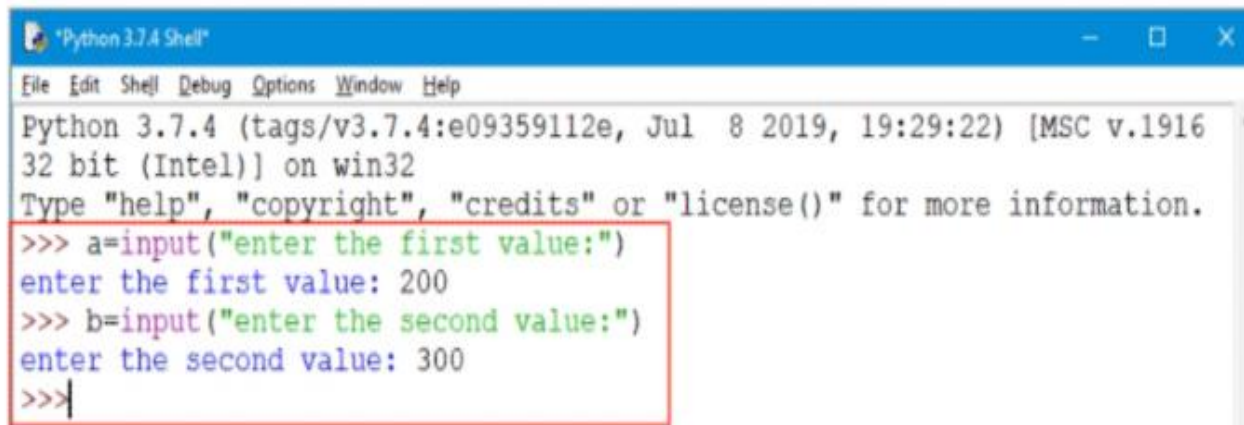
## 1. Create Module/Script/Program File:

- i. Open **IDLE Python**.
- ii. Click on the **File > New File** in IDLE Python Shell as shown in Figure 8.14.
- iii. In the new window that opens, type the commands you want to save as a program as shown in Figure 8.15.

## ➤ Input() FUNCTION

**Input()** function is used to accept the value for a variable from the user. To input integer and float values, we can use **int()** or **float()** along with **input()**.

### Program 1:



```
Python 3.7.4 (tags/v3.7.4:e09359112e, Jul 8 2019, 19:29:22) [MSC v.1916
32 bit (Intel)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>> a=input("enter the first value:")
enter the first value: 200
>>> b=input("enter the second value:")
enter the second value: 300
>>>
```

**Figure 8.19:** Using Input() function

In Python, **input()** function takes one string argument. This means that whatever value is being entered by the user, it will be taken as a string argument.

## EXAMPLE

- Write down a python program to input length and breadth display the area and perimeter?
- `l= int(input("enter length of rectangle"))`
- `b=int(input("enter breadth of rectangle"))`
- `area=l*b`
- `p=2*(l+b)`
- `print("Area is", area,"perimeter is ",p)`



# HOME ASSIGNMENT

- what is variable?
- What are the rules to give the name of a variable?
- Give some valid and invalid names of variable?
- Write a program to input two numbers and display the sum on the output screen.
- Write a program to input the radius of a circle, display the area and circumference?
- Write a program to input length and breadth of a rectangle and display the area and perimeter?
- Write a program to input the basic salary of an employee and calculate 15% DA, 12% TA and 7% HRA of basic salary and calculate gross salary.

**THANKING YOU**  
**ODM EDUCATIONAL GROUP**