

PYTHON - MODULE

What is Module? full Explanation.

--> Modules are nothing but group of functions, variables and classes that are saved to a file. Every python (.py) file act as module

note: -

- i. code reusability.
- ii. if python file (first.py) called module then its module name should be first.

Module Alising: -

To improve readability.

To prevent name conflicting...

- types: -
1. pre-defined random calender keyword
 2. user-defined first add codefile

example: -

first.py

```
def show():  
    print("Hello")
```

second.py

```
import first  
first.show()
```

Practical: -

pre-defined Module

```
import calendar  
print(calendar.month(2024,1))
```

```
import keyword  
print(keyword.kwlist)
```

first.py File Define and call

User-defined Module

```
def show(): # function Define  
    print("Hi, Shri")  
  
show()      # calling Function
```

Output: -

Hi, Shri

Using **Import** keyword

Ex. 1: -

First File : - first.py

```
# User-defined Module #  
  
def show():      # function Define  
    print("Hi, Shri")
```

Second File : - second.py

```
# User-defined Module #  
  
import first  
print(first.show())
```

Execute Second File

Output: -

```
Hi, Shri  
None
```

Note: - Define Multiple Function in first first.py file and run using second second.py file using import module.

Ex. 2: -**First File : - first.py**

User-defined Module

```
def calculator(a,b):  
    print("Addition: ",a+b)  
    print("Subtraction: ",a-b)  
    print("Multiplication: ",a*b)  
    print("Division: ",a/b)
```

Second File : - second.py

User-defined Module

```
import first  
first.calculator(8,3)
```

Execute Second File**Output: -**

```
Addition: 11  
Subtraction: 5  
Multiplication: 24  
Division: 2.6666666666666665
```

Using **From** Keyword

Ex. 3: -

First File : - first.py

```
# User-defined Module #
import calendar

def calculator(a,b):
    print("Addition: ",a+b)
    print("Subtraction: ",a-b)
    print("Multiplication: ",a*b)
    print("Division: ",a/b)

def greeting():
    print("Good Morning")

def month():
    print(calendar.month(2023,12))
```

Second File : - second.py

```
# User-defined Module #

from first import month,greeting
month()
greeting()
```

Execute Second File

Output: -

```
December 2023
Mo Tu We Th Fr Sa Su
          1 2 3
 4 5 6 7 8 9 10
11 12 13 14 15 16 17
18 19 20 21 22 23 24
25 26 27 28 29 30 31
```

Good Morning

Note: - Print All method in first.py file used astric(*) to import module.