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MODULES



ZOOMING



Python - Modules

- A module is a file containing Python definitions and statements.
- A module can define functions, classes and variables.
- A module can also include runnable code.

```
# A simple module, calc.py
```

```
def add(x, y):  
    return (x+y)
```

```
def subtract(x, y):  
    return (x-y)
```



Module – *import* Statement

- it imports the module if the module is present in the search path.

```
# A simple module, calc.py
```

```
def add(x, y):  
    return (x+y)
```

```
def subtract(x, y):  
    return (x-y)
```

```
# importing module calc.py  
import calc
```

```
print add(10, 2)
```

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Module – *from-import* Statement

- It import specific attributes from a module

```
# module math  
from math import sqrt, factorial
```

```
print sqrt(16)  
print factorial(6)
```

```
4.0  
720
```



Module – **dir()** function

- The dir() built-in function returns a sorted list of strings containing the names defined by a module.
- The list contains the names of all the modules, variables and functions that are defined in a module.

```
# Import built-in module random
import random
print dir(math)
```

