

# Modules

Ramesh Sannareddy

# What is a module?

Any reusable piece of code, in a separate file.

Usually contains variables, functions, classes.



# How to find what modules are installed?

```
>>>help("modules")
```



# How to import a module?

```
>>> import math
```

```
>>> math.sin(90)
```



# How can I import only a function from module?

```
>>> from random import randint
```

```
>>> randint(3,30)
```

```
>>>
```

```
>>> from math import sin,cos,tan
```

```
>>> cos(90)
```

```
>>> sin(90)
```



# How to alias a module?

```
>>> import random as rd
```

```
>>> rd.random()
```

```
>>>
```

```
>>> from math import factorial as f
```

```
>>> f(6)
```



# How do I know what functions are in a module?

```
>>> import math
```

```
>>> dir(math)
```



# How can I get help on a function?

```
>>> import math
```

```
>>> help(math.sin)
```





# PYMOTW



# Where are the modules installed?

lib folder in python installation directory (Windows)

/usr/lib/python on linux

```
>>> import sys
```

```
>>> sys.path
```



pypi.org



# How to install a 3rd party module?

`pip install bottle`

`pip list`

`pip show bottle`

`pip uninstall bottle`



# Where are 3rd party modules installed?

lib/site-packages

