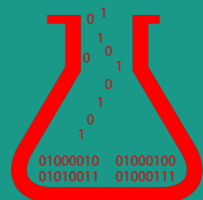




# Libraries

# --- Libraries



# Modules and packages



Libraries two important forms.

## Modules

Simply .py file with multiple functions

Importing a module imports the functions in the .py file

## Packages

A package is a folder with relate modules inside it

The package must have a file called `__init__.py` to tell python that a folder is a package

Importing a package imports all the modules in the folder

# Import Statement



Importing libraries is done with the “import” statement

Imports must be at the top of the script

Example:

```
import random
```

Objects within the library can be accessed with dot notation:

```
random.choose(mylist)
```

Objects can also be imported as an import from:

```
from random import choose
```

```
choose(mylist)
```

More on the Random library can be found here:

<https://docs.python.org/3/library/random.html>

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# Other syntaxes for imports



```
Import numpy as np
    i.e. np.zeros([10,10])
from numpy import *
    zeros([10,10])
from numpy import zeros
    zeros([10,10])
from numpy import zeros as z
    z([10,10])
```



# Import Statement

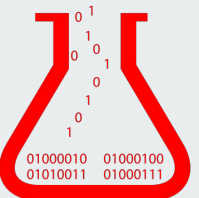


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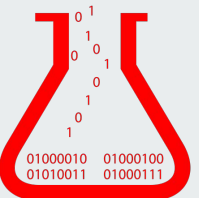
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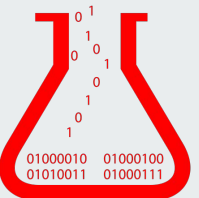
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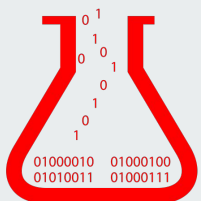
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# Import with \*

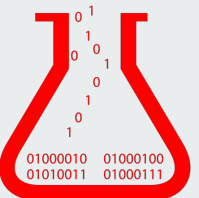
Importing with \* is *never* advisable.

Importing with \* imports all functions/classes/variables from the module, with unintended consequences.

Example:

From numpy import \*

help(sum), see the difference before and after import \* overwrites sum()



# Instead of Import with \*

When using `from <libraryname> import <modulename/s>`, list out the specific modules you want to import

