

modules

Python's language can be augmented by new functions and object from modules. They are imported with the function `import`.

Example 1 (in `ipython` command line):

```
import math
math.sin(1.3)
```

Example 2:

```
import numpy as np
import matplotlib.pyplot as plt
plt.plot(np.sin(np.linspace(0, 6*np.pi, 500)))
plt.show()
```

Example 3:

```
import random
random.<TAB>
random?
```

Note: It is easy to create one's own module: having a file `mymodule.py` in the current directory, it is possible to use `import mymodule`.

Have a look at the `turtle` module <https://docs.python.org/2/library/turtle.html>

EX: Write the following program in `atom`, save it and execute it

```
import turtle
turtle.forward(100)
turtle.left(120)
turtle.forward(100)
turtle.left(120)
turtle.forward(100)
turtle.left(120)
turtle.mainloop()
```

Modify this program to display a regular polygon with 'n' sides

A few useful functions on strings

```
a = "Bonjour Jean"
len(a)
a[2:4]

a.replace("Jean", "Marc")
a
b = a.replace("Jean", "Marc")

a = "caillou, genou, bijou"
a.split(",")

b= ['alpha', 'beta', 'gamma']
";".join(b)
```

Ex: