Modules in Python

Outlines

- Modules
- Math Module
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- Calendar Module

Modules

The whole idea of "reuse" applies to programming world as well. In python Modules is a way to reuse a code written by someone else. You can use module written by someone else for free in your code.

Math Module

In [22]:
```
# how to use math module
import math
math.sqrt(36)
```

Out[22]: 6.0

In [23]:
```
math.pow(2,3)
```

Out[23]: 8.0

Functions access in module

use this code dir(name of the function) or you can google it python math module

In [24]:
```
dir(math)
```

Out[24]:
```
['__doc__',
 '__loader__',
 '__name__',
 '__package__',
 '__spec__',
 'acos',
 'acosh',
 'asin',
 'asinh',
 'atan',
 'atan2',
 'atanh',
 'ceil',
 'comb',
 'copysign',
 'cos',
 'cosh',
 'degrees',
 'dist',
 'e',
 'erf',
 'erfc',
 'exp',
 'expm1',
 'fabs',
 'factorial',
 'floor',
 'fmod',
 'frexp',
 'fsum',
 'gamma',
 'gcd',
 'hypot',
 'inf',
 'isclose',
 'isfinite',
 'isinf',
 'isnan',
 'isqrt',
 'ldexp',
 'lgamma',
 'log',
 'log10',
 'log1p',
 'log2',
 'modf',
 'nan',
 'perm',
 'pi',
 'pow',
 'prod',
 'radians',
 'remainder',
 'sin',
 'sinh',
 'sqrt',
 'tan',
```

```
 'tanh',
 'tau',
 'trunc']
```

In [25]:
```
math.pi
```

Out[25]:
```
3.141592653589793
```

In [26]:
```
math.log10(100)
```

Out[26]:
```
2.0
```

In [27]:
```
math.floor(2.3)
```

Out[27]:
```
2
```

In [28]:
```
math.ceil(2.3)
```

Out[28]:
```
3
```

Calendar Module

In [29]:
```
import calendar
```

In [33]:
```
cal = calendar.month(2016,1)
print(cal)
```

```
    January 2016
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
```

In [32]:
```
calendar.isleap(2016)
```

Out[32]:
```
True
```

In [36]:
```
calendar.isleap(2014)
```

Out[36]:
```
False
```

you can access all the calendar modules by this code: dir(calendar)

Find list of all the python Modules by Google: type Python 3 module list. the first will give the answer.

Date **Author**

Date	Author
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