

Let's have a look at an example module, namely *tempConversion* in figure 4.2.

(Please note, it is not from Python's standard library ; it is a user created module, shown here for your understanding purposes).

```

# tempConversion.py
""" "Conversion functions between fahrenheit and centigrade" """

# Functions

def to_centigrade(x):
    """ "Returns: x converted to centigrade" """
    return 5 * (x - 32) / 9.0

def to_fahrenheit(x):
    """ "Returns: x converted to fahrenheit" """
    return 9 * x / 5.0 + 32

# Constants
FREEZING_C = 0.0    # water freezing temp.(in celcius)
FREEZING_F = 32.0  # water freezing temp.(in fahrenheit)
    
```

A docstring : There are two more docstrings in this module – one each inside each function

Two function-definitions inside module tempConversion.py

STYLE-CONVENTION
Two blank lines between two function definitions

Two constants defined

Figure 4.2 A sample module (tempConversion.py)

The elements of module shown in figure 4.2 are :

<u>Name of the module</u>	tempConversion		
<u>Module file name</u>	tempConversion.py		
<u>Contains</u>	Two Functions	(i) to_centigrade()	(ii) to_fahrenheit()
	Two Constants ²	(i) FREEZING_C	(ii) FREEZING_F
	Three docstrings (triple quotes strings)		

constant as shown below : strings along with module name, filename, functions' name and

```
>>> import tempConversion
>>> help(tempConversion)
Help on module tempConversion :

NAME
tempConversion - Conversion functions between fahrenheit and centigrade

FILE
c:\python37\pythonwork\tempconversion.py

FUNCTIONS
to_centigrade(x)
    Returns : x converted to centigrade
to_fahrenheit(x)
    Returns : x converted to fahrenheit

DATA
FREEZING_C = 0.0
FREEZING_F = 32.0
```

The docstrings of module displayed as documentation

NOTE

The docstrings are triple quoted strings in a Python module/program which are displayed as document when `help (<module-or-program-name>)` command is issued.

There is one more function `dir()` when applied to a module, gives you names of all that is defined inside the module. (see below)

```
>>> import tempConversion
>>> dir(tempConversion)
['FREEZING_C', 'FREEZING_F', '__builtins__', '__doc__', '__file__',
 '__name__', '__package__', 'to_centigrade', 'to_fahrenheit']
```

General docString conventions are :

- ❖ First letter of first line is a capital letter.
- ❖ Second line is blank line.
- ❖ Rest of the details begin from third line.

FUNCTION PROGRAM