

# Cheatsheet: Python Coding Practices and Packaging Concepts



**Skills**  
Network

**Estimated time needed:** 5 minutes

Package/Method	Description	Code Example
Packaging	<p>To create a package, the folder structure is as follows:</p> <ol style="list-style-type: none"><li>1. Project folder → Package name → <code>__init__.py</code>, <code>module_1.py</code>, <code>module_2.py</code>, and so on.</li><li>2. In the <code>__init__.py</code> file, add code to reference the modules in the package.</li></ol>	<b>module1.py</b> <pre>def function_1(arg):     return &lt;operation output&gt; <b>__init__.py:</b> from . import function_1</pre>
Python Style Guide	<ul style="list-style-type: none"><li>• Four spaces for indentation</li><li>• Use blank lines to separate functions and classes</li><li>• Use spaces around operators and after commas</li><li>• Add larger blocks of code inside functions</li><li>• Name functions and files using lowercase with underscores</li><li>• Name classes using CamelCase</li><li>• Name constants in capital letters with underscores separating words</li></ul>	<pre>def function_1(a, b):     if a &gt; b:         c = c + 5     else:         c = c - 3     return c ... c = function_1(a, b)</pre> <p><b>Constant Definition example</b></p> <pre>MAX_FILE_UPLOAD_SIZE</pre>

Package/Method	Description	Code Example
<b>Static Code Analysis</b>	<p>Use Static code analysis method to evaluate your code against a predefined style and standard without executing the code.</p> <p>For example, use Pylint to perform static code analysis.</p>	<p><b>Shell code:</b></p> <pre>pylint code.py</pre>
<b>Unit Testing</b>	<p>Unit testing is a method to validate if units of code are operating as designed.</p> <p>During code development, each unit is tested. The unit is tested in a continuous integration/continuous delivery test server environment.</p> <p>You can use different test functions to build unit tests and review the unit test output to determine if the test passed or failed.</p>	<pre>import unittest  from mypackage.mymodule import my_function  class TestMyFunction(unittest.TestCase):      def test_my_function(self):         result = my_function(&lt;args&gt;)          self.assertEqual(result, &lt;response&gt;)  unittest.main()</pre>

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