

## MTH 337 B

### QUIZ 4 SAMPLE

Name:

UB Person Number:

0	0	0	0	0	0	0	0	0
1	1	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	3
4	4	4	4	4	4	4	4	4
5	5	5	5	5	5	5	5	5
6	6	6	6	6	6	6	6	6
7	7	7	7	7	7	7	7	7
8	8	8	8	8	8	8	8	8
9	9	9	9	9	9	9	9	9

Instructions:

- If the first column of the quiz contains Python code, in the second column write the output that this code produces when executed.
- If the second column contains a description of some Python operation, in the first column write the code that will perform this operation.
- Treat the first column as a sequence of Jupyter Notebook code cells that are executed from top to bottom. This means e.g. that you import some module in one cell, then you don't need to import it again in the following cells. If you define some variable or function in one cell, then you can use it in the following cells.

	<b>Python Code</b>	<b>Result</b>	
1.	<pre>import numpy as np a = np.zeros((2, 3), dtype=int) print(a)</pre>		
2.	<pre>b = np.linspace(1, 2, 3) print(3*b)</pre>		
3.	<pre>c = np.arange(6).reshape(2, 3) c[0, 1] = 100 print(c)</pre>		
4.	<pre>d = np.ones((3, 3)) d[:2, :2] = 2 print(d)</pre>		
5.	<pre>e = np.arange(9).reshape(3, 3) print(e[:, 2])</pre>		
6.		<p>For the remainder of this quiz assume that the following code has been executed:</p> <pre>import numpy as np</pre> <p>Write a statement that creates a numpy array consisting of 100 entries, such that each entry is equal to 5.</p>	
7.		<p>Write a statement that creates a numpy array <code>myarr</code> such <code>myarr[0] = 10</code>, all subsequent entries are increasing by 0.5 (that is <code>myarr[1] = 10.5, myarr[2] = 11.0</code>, etc.), and <code>myarr[-1] = 30</code>.</p>	