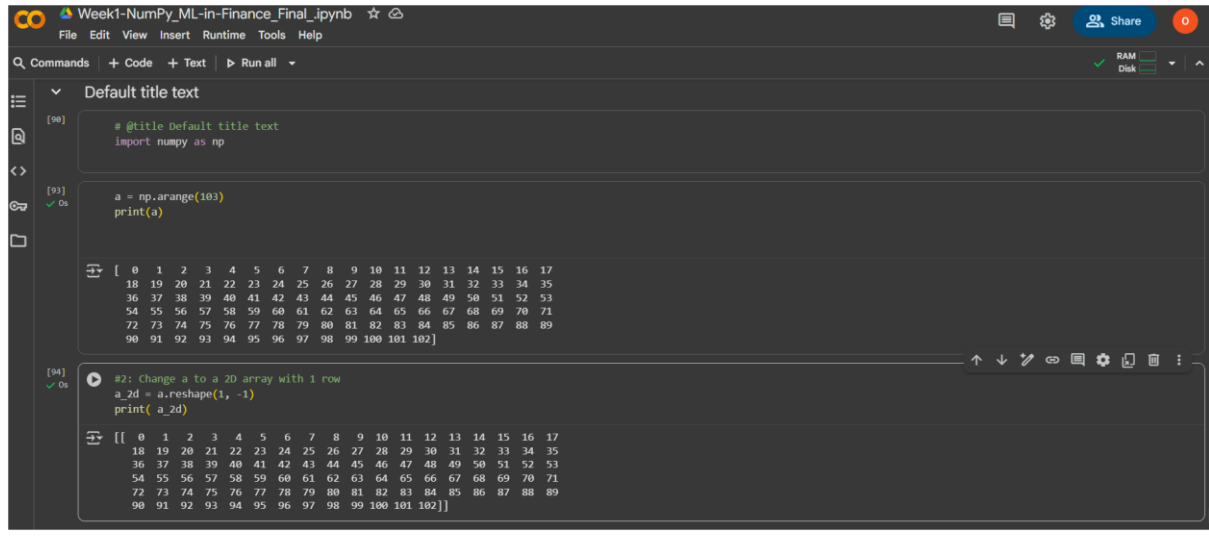


LAB Logbook

Lab 1



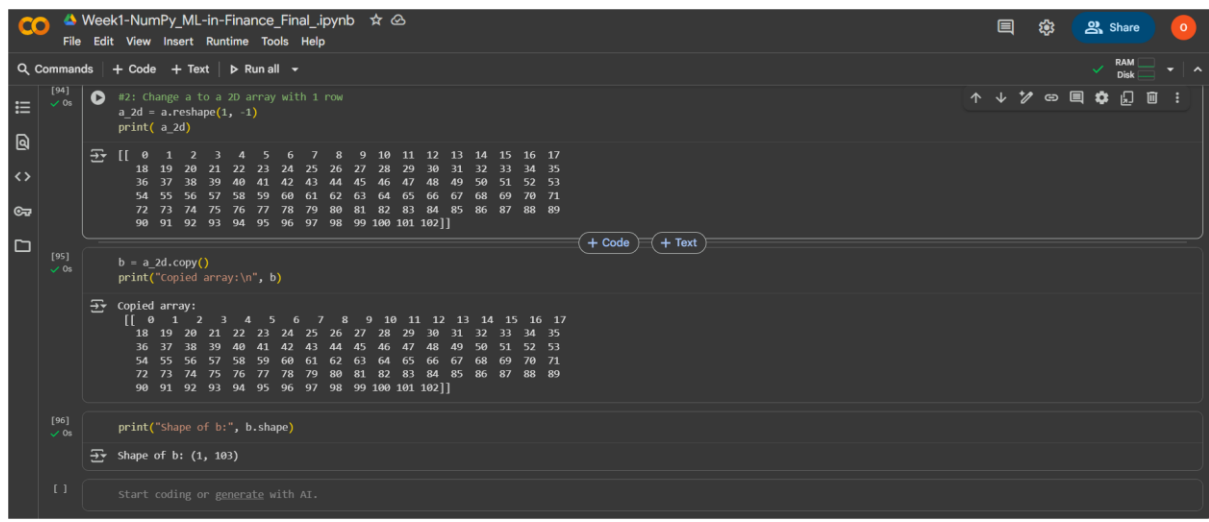
This screenshot shows a Jupyter Notebook titled "Week1-NumPy_ML-in-Finance_Final_ipynb". It contains three code cells. The first cell imports NumPy and sets a default title. The second cell creates a 1D array 'a' of 103 elements and prints it. The third cell reshapes 'a' into a 2D array 'a_2d' with 1 row and 103 columns, then prints it.

```
[90] # @title Default title text
import numpy as np

[93] a = np.arange(103)
print(a)

[[ 0  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 32 33 34 35
 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53
 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71
 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89
 90 91 92 93 94 95 96 97 98 99 100 101 102]]

[94] #2: Change a to a 2D array with 1 row
a_2d = a.reshape(1, -1)
print(a_2d)
```



This screenshot continues the Jupyter Notebook from the previous one. It shows two more code cells. The first cell copies the 2D array 'a_2d' into 'b' and prints it. The second cell prints the shape of 'b'.

```
[95] b = a_2d.copy()
print("copied array:\n", b)

copied array:
[[ 0  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 32 33 34 35
 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53
 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71
 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89
 90 91 92 93 94 95 96 97 98 99 100 101 102]]

[96] print("Shape of b:", b.shape)

Shape of b: (1, 103)

[ ] Start coding or generate with AI.
```

Lab 2

Lab 3

Lab 4

Lab 5

Lab 6

Lab 7

Lab 8

Lab 9

Lab 10

Lab 11

Lab 12