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SID: 2463693

Class: MSc Computer Science

Subject: Machine Learning in Finance

Topic: Lab Logbook Week 1

Date: 9/28/2025

Question:
Part 1:

```
[2]
✓ 0s
        #Lab Logbook Week 1
        # Question Number 1
        import numpy as np
        print("SID = 2463693")

        SID = 2463693

[3]
✓ 0s
        Last_Two= 93
        new = np.arange(Last_Two)
        print("New Vector is", new)

        New Vector is [ 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]
```

Part 2:

```
[5]
✓ 0s
        #part 2
        New_reshaped = new.reshape(1, -1)
        print("New 2D shape will be", New_reshaped)

        New 2D shape will be [[ 0  1  2  3  4  5  6  7  8  9 10 11 12 13 14 15 16 17 18 19 20 21
          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]]
```

Part 3

```
[6]
✓ 0s
        #part 3
        copied_shape = New_reshaped.copy()
        print("copied =", copied_shape)

        copied = [[ 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]]
```

Part 4

```
[7]
✓ 0s
        #part 4
        print("shape of Variable is", copied_shape.shape)

        shape of Variable is (1, 93)
```

Code:

#Lab Logbook Week 1
# Question Number 1
import numpy as np

```python
print("SID = 2463693")
Last_Two= 93
new = np.arange(Last_Two)
print("New Vector is", new)
#part 2
New_reshaped = new.reshape(1, -1)
print("New 2D shape will be", New_reshaped)
#part 3
copied_shape = New_reshaped.copy()
print("copied =", copied_shape)
#part 4
print("shape of Variable is", copied_shape.shape)
```

_____THE END_____