MACHINE LEARNING IN FINANCE WEEK-1 LOG BOOK

```
import numpy as np

SID = 23750107
last_two_digits = int(str(SID)[-2:])

if last_two_digits < 10:
    num_elements = last_two_digits + 100
else:
    num_elements = last_two_digits

a = np.arange(num_elements)
a_2d = a.reshape(1, -1)

print(a_2d)

b = a_2d.copy()

print(b)

print(a_2d.shape)
print(b.shape)</pre>
```

OUTPUT:

[[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 99 100 101 102 103 104 105 106]] [[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 99 100 101 102 103 104 105 106]] (1, 107) (1, 107)

```
[[ 0
             3
      1
         2
                        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
  36 37 38 39 40 41 42 43 44 45 46 47 48 49
                                                      50 51 52 53
      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
  90 91
         92
             93
                 94
                     95
                        96
                            97
                                98
                                   99 100 101 102 103 104 105 106]]
0 ]]
                 4
                            7
      1
          2
             3
                     - 5
                         6
                                8
                                    9
                                      10 11
                                              12
                                                  13
                                                      14 15
                                                             16
  18 19 20 21 22 23 24 25 26 27 28 29
                                              30
                                                      32
                                                  31
                                                          33
  36 37 38 39 40
                    41 42 43 44 45 46 47
                                              48 49
                                                      50
                                                          51
                                                             52
                                                                 53
                            61 62 63 64 65
  54
     55 56 57 58
                    59
                        60
                                              66 67
                                                      68
                                                          69
                                                             70
                                                                 71
  72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106]]
(1, 107)
(1, 107)
```

File Edit View Insert Runtime Tools Help

```
ŧ≡
                                   import numpy as np
Q
                                                SID = 23750107
                                                last_two_digits = int(str(SID)[-2:])
<>
                                                if last_two_digits < 10:
                                                         num_elements = last_two_digits + 100
ಾ
                                                else:
                                                           num_elements = last_two_digits
a = np.arange(num_elements)
                                               a_2d = a.reshape(1, -1)
                                                print(a_2d)
                                               b = a_2d.copy()
                                               print(b)
                                                print(a_2d.shape)
                                                print(b.shape)
                                 ☐ 1 2 3 4 5 6 7 8 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 99 100 101 102 103 104 105 106]

[[ 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 7 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 99 100 101 102 103 104 105 106]

[[ 1 0 1 2 3 4 5 6 7 8 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 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 99 100 101 102 103 104 105 106]]

(1, 107)

(1, 107)
                                                 (1, 107)
```