# MACHINE LEARNING IN FINANCE

## WEEK-1 LOG BOOK

```python
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)
```

## 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    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)
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   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
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