

$$m = \begin{bmatrix} 1 & 2 & 3 \\ 4 & 5 & 6 \\ 7 & 8 & 9 \end{bmatrix}$$

Maths
Matrix

$$m = [[1, 2, 3], [4, 5, 6], [7, 8, 9]]$$

We can create matrix
in Python using
list of lists

```

matrix1 = [[1,2,3],[4,5,6],[7,8,9]]
matrix2 = [[100,200,300],[400,500,600],[700,800,900]]
matrix3 = []

for row_index in range(len(matrix1)):
    temp = []
    for col_index in range(len(matrix1[0])):
        temp.append(matrix1[row_index][col_index] + matrix2[row_index][col_index])
    matrix3.append(temp)

print(matrix3)
[[101, 202, 303], [404, 505, 606], [707, 808, 909]]

```

$$\text{matrix1}[0] = [1, 2, 3]$$

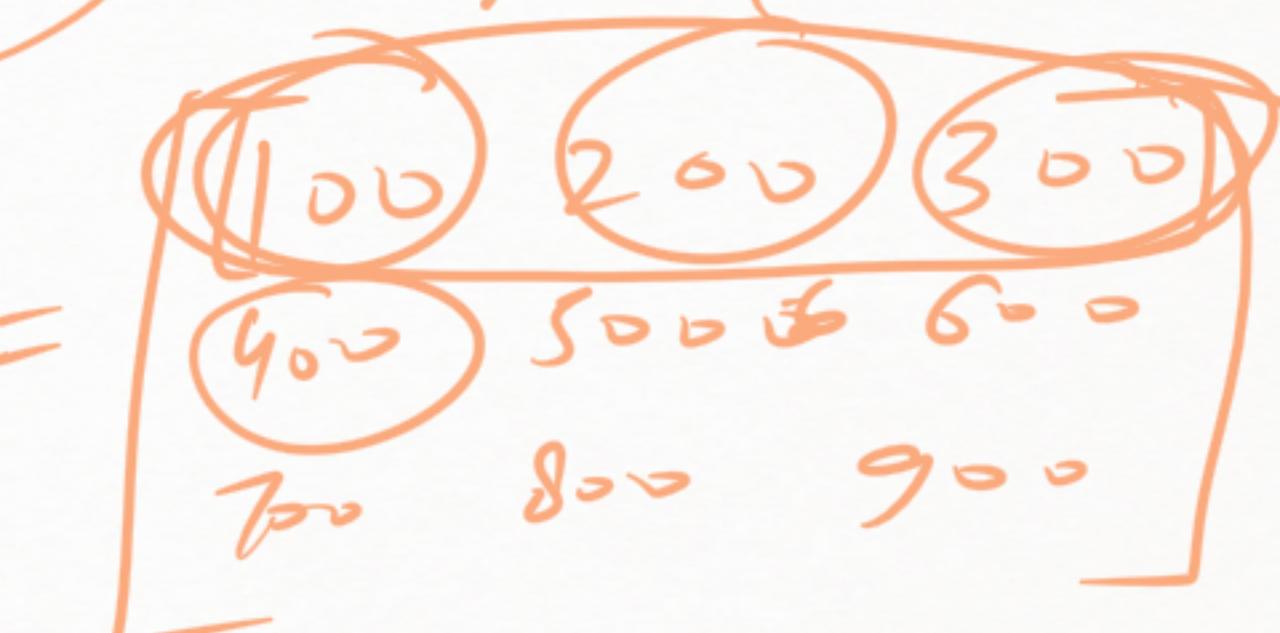


$$x = [[0, 1, 2], [], []]$$

$$x[0][0] = 0 \checkmark$$

cols =

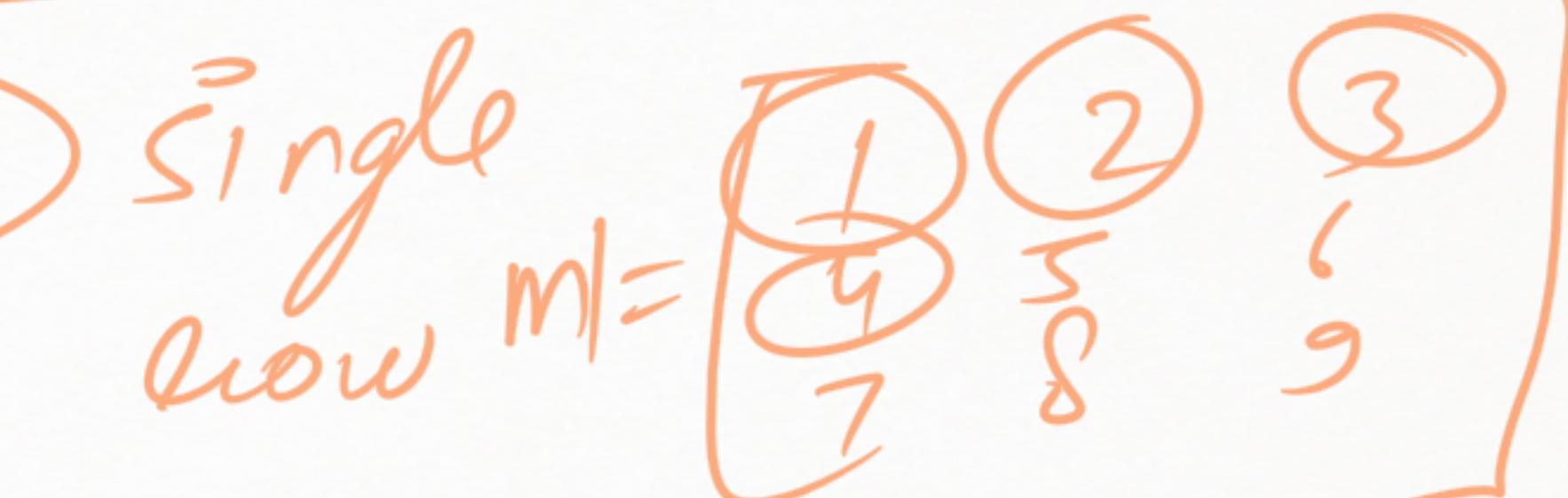
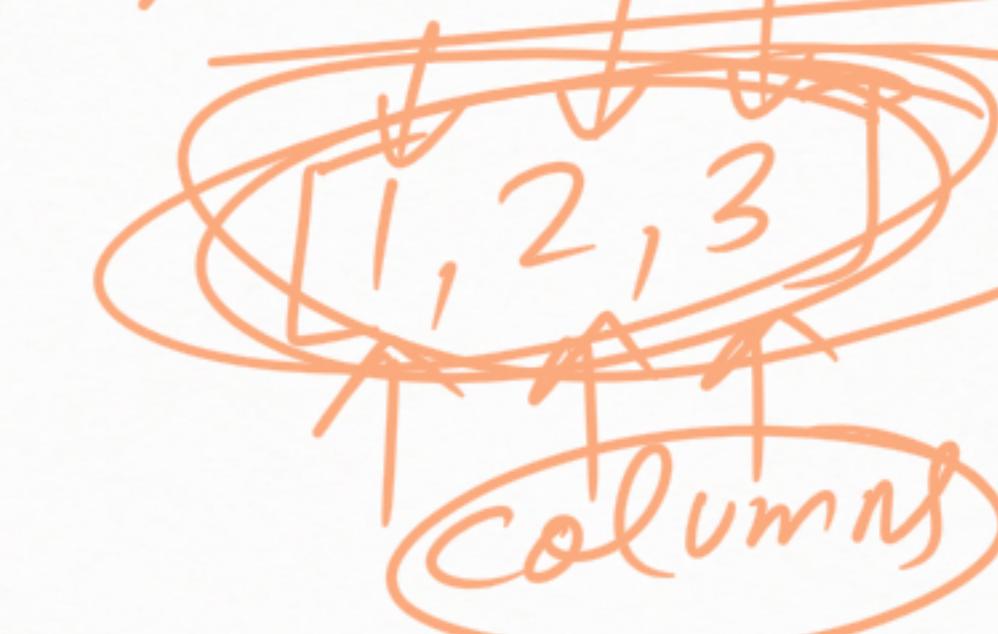
$$\text{len}(m1[0]) \checkmark$$



$$m^2 = [[101, 202, 303], []]$$

$$\text{temp} = [101, 202, 303]$$

$$\text{rows} = \text{len}(m1) \quad (100, 200, 300)$$



```
1 list1 = [1, 2, 3]
2
3 x = list1.pop(2)
4
5 |
```

↓
0 1 2 # Returning a
Value

This element
will get deleted

Pop function deletes the element 3 present at 2nd index position

it replaces the element
3 which it deleted

