

1. I want to create a 2-dimension list, representing a matrix

```

1   -2   3   9   10
3   12  -9  12   9
-11 65   4   8   5

```

Each row will be represented by a list, and the matrix will be a list of lists.

Use some of the blocks below to define such a list Matrix (feel free to use Python interpreter for help).

```
Matrix = []
```

```
a = [1, -2, 3, 9, 10]
```

```
A = [[1], [-2], [3], [9], [10]]
```

```
Matrix.append(a)
```

```
Matrix = [ [1, -2, 3, 9, 10] ]
```

```
Matrix.append(A)
```

```
B = [[3], [12], [-9], [12], [9]]
```

```
b = [3, 12, -9, 12, 9]
```

```
Matrix.append(B)
```

```
Matrix.append(b)
```

```
C = [-11, 65, 4, 8, 5]
```

```
c = [[-11], [65], [4], [8], [5]]
```

```
Matrix.append(c)
```

```
Matrix.append(C)
```

2. Assume we have the following list representing a matrix:

```

A = [ [1,2,3,4],
      [0,1,2,3],
      [8,7,6,5],
      [3,4,2,1],
      [1,2,9,3] ]

```

1) write the statement to display the third row

2) write the code to print the elements of the 3<sup>rd</sup> column using a loop

3. Consider the following code

```
from random import randint  
  
L = []  
  
for i in range(10):  
    a = randint(-100,0)  
    b = randint(0,100)  
    L.append((a,b))
```

It creates a list of 10 elements. Each element is a tuple, for example

`L = [ (-6,8), (-2,0), (-1,9), (-5,7), (0,2), (-5,8), (0, 8), ... ]`

Write the code to print out the list of squares of the second elements in the tuples if the first element in the tuple is not 0, separated by a comma with a space.

Here is what we should get for the list `L` above:

`64, 0, 81, 49, 2, 64, 8, ...`