Python Practice

The following question cannot use python to solve, only use your brain <a>;:

1.

```
a = 3
if a == 1 or 2:
    print(a)
else:
    print(1)
```

会返回什么?

2.如果 run

```
a=[(1,2,3),(4,5,6)]
a[0,1]
```

会得到

A. 2

B. None

C. TypeError: list indices must be integers or slices, not tuple

D. IndexError: tuple index out of range

E. SyntaxError: invalid syntax

3.lf I run

```
print(print(print(1)))
```

what can I get?

4

```
x = 10

def outer():
    x = 20
    def inner():
        nonlocal x
        x = 30
        print("inner:", x)
    inner()
    print("outer:", x)
outer()
print("global:", x)
```

返回什么?

The following question can be use Python to solve and give out the code:

5. Use one line code to make a list such that

```
[0, 1, 4, \cdots, 100^2]
```

6.给定一个数组 $s=[a_1,a_2,\cdots,a_n]$ (已经存在,不需要你定义),设计一个 algorithm 使得 s 变成

[a_n,a_1,a_n-1,a_2,a_n-2,···]

6*: 尝试 6 只用一层 for loop

7.There are there positive integers x,y,z. Find the n-th decimal of the number x^{y} (找到第 n 位,0 为个位,1 为十位)

Hint: x^y maybe too big to calculate

Easy Algorithm Problem

8.

