

Python Beginner Homework 10

In the following multiple choice questions, please circle the correct output of Python code.

1.

```
nums=[1,3,5,7,9]
del nums[3]
del nums[3]
del nums[3]
print(len(nums))
```

(a) 5 (b) 4 (c) 3 (d) 2 (e) index out of range
2.

```
nums=[1,3,5,7,9]
del nums[0]
del nums[1]
del nums[2]
print(nums)
```

(a) [1,3,5,7,9] (b) [7,9] (c) [3,7] (d) [1,5,9] (e) index out of range
3.

```
nums=[3,3,5,4,9,6,4,6,7,8]
for i in range(0,4):
    if nums[i]%3 == 0:
        del nums[i]
print(nums)
```

(a) [3,5,4,6,4,6,7,8] (b) [] (c) [5,4,4,7,8] (d) index out of range (e) [5,4,4,6,7,8]
4.

```
nums=[3,2,5,4,9,5,4,6,7,8]
nums1 = [3,2,4,1]
for i in range(0, len(nums1)):
    del nums[nums1[i]]
print(nums)
```

(a) [2,5,4,5,4,7,8] (b) [] (c) [3,9,5,6,7,8] (d) index out of range (e) [6,9,3]
5.

```
nums=[1,2,3,4]
nums1=[3,1,4,2]
for i in range(0, len(nums1)):
    nums.insert(nums1[i],i)
print(nums)
```

(a) [0,1,2,3,1,2,3,4] (b) [1,1,3,2,3,2,0,4] (c) [4,3,2,1,0,1,2,3] (d) [3,1,2,4,2,3,1,4] (e) [0,1,1,2,2,3,3,4]

Coding question 1: From list `nums=[4,3,5,6,3,4,7,9]`, delete all even numbers. Answer should be `[3,5,3,7,9]`.

Coding question 2: From list `nums=[4,3,5,6,3,4,7,9,6,4,2]`, find index of max value. Answer should be 7.

Coding question 3 (hard): From list `nums=[4,3,5,6,3,4,7,9,6,4,2]`, using above code, delete max value from the list. Answer should be `[4,3,5,6,3,4,7,6,4,2]`,

Coding question 4 (hard): Based on last code, add max value into another new list `sorted_nums`. Keep deleting next max value, and adding next max value into this `sorted_nums`. In the end `nums` will be empty, and `sorted_nums` will be `[9,7,6,6,5,4,4,4,3,2]`.