

Python Beginner Homework 8

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

1.

```
nums=[1,3,5,7,9]
sum = 0
for i in range(0, len(nums)):
    sum = sum + nums[i]
print(sum)
```

(a) 15 (b) 20 (c) 25 (d) 30 (e) 35
2.

```
nums=[1,3,5,7,9]
sum = 0
for i in range(0, len(nums),2):
    sum = sum + nums[i]
print(sum)
```

(a) 15 (b) 20 (c) 25 (d) 30 (e) 35
3.

```
nums=[3,2,5,4,9,5,4,6,7,8]
sum = 0
for i in range(0, len(nums)):
    if nums[i]%3==0:
        sum = sum + nums[i]
print(sum)
```

(a) 15 (b) 12 (c) 10 (d) 18 (e) 17
4.

```
nums=[3,2,5,4,9,5,4,6,7,8]
sum = 0
for i in range(0, len(nums)):
    if i%3==0:
        sum = sum + nums[i]
print(sum)
```

(a) 15 (b) 12 (c) 10 (d) 19 (e) 17
5.

```
nums = [4,3,6,2,4]
for i in range(0, len(nums), 1):
    if (nums[i] > 3):
        nums[i] = 0
print(nums)
```

(a) [0,0,0,0,0] (b) [0,0,0,2,0] (c) [4,3,6,2,4] (d) [3,3,3,3,3] (e) [0,3,0,2,0]
6.

```
nums1 = [1,2,3,4,5]
nums2 = [5,4,3,2,1]
sum = 0
for i in range(0, len(nums1), 1):
    sum = sum + nums1[i] + nums2[i]
print(sum)
```

(a) 30 (b) 35 (c) 45 (d) 18 (e) 27

Coding question 1: Find out minimum value for a list. For example, for `nums=[4,3,5,6,3,4,7,9]`, answer should be 3.

Coding question 2: Count how many negative values in a list. For example, for `nums=[4,3,-5,-4,0,5,-7,8,-9]`, answer should be 4.

Coding question 3 (hard): Count how many prime numbers in a list. For example, for `nums=[4,3,5,6,3,4,7,9]`, answer should be 4.

Coding question 4 (hard): print out all common factor of all values in a list. For example, for `nums=[12,36,48,24,12,18]`, answer should be 2,3,6.