

Python Homework 1

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

1.

```
for num in range(1,5,2):  
    print(num)
```

(a) 1 2 3 (b) 1 3 5 (c) 0 1 2 3 (d) 1 3 (e) 3 2 1 0 -1
2.

```
for num1 in range(0,3,1):  
    for num2 in range(1,3,1):  
        print(num2)
```

(a) 1 2 3 1 2 3 (b) 1 1 2 2 3 3 (c) 1 2 1 2 1 2 (d) 1 2 1 2 (e) 0 1 2 0 1 2
3.

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

(a) 15 (b) 20 (c) 25 (d) 30 (e) 35
4.

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

(a) 10 (b) 11 (c) 12 (d) 13 (e) 14
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: Make a function `is_even(num)` to check if any number is even or not.

Coding question 2: Make a function `get_lcm(num1, num2)` to calculate least common factor of 2 numbers.

Coding question 3: Make a function `count_num_even(nums)` to count how many even numbers in a list.

Coding question 4: Make a function `get_sum(nums)` to calculate sum of a list.