Q1. Split this string

    s = "Hi there Class!"

into a list.

Q2. Given the variables

    planet = "Earth"

    diameter = 12742

Use .format() to print the following string:

    The diameter of Earth is 12742 kilometers.

Q3. Given this nested list, use indexing to grab the word "hello"

lst = [1,2,[3,4],[5,[100,200,['hello']],23,11],1,7]

Q4. Given this nested dictionary grab the word "hello".

d = {'k1':[1,2,3,{'tricky':['oh','man','inception',{'target':[1,2,3,'hello']}]}]}

Q5. Create a function that grabs the email website domain from a string in the form:

    user@domain.com

Q6. Create a basic function that returns True if the word 'dog' is contained in the input string.

Q7. Create a function that counts the number of times the word "dog" occurs in a string.

Q8. Use lambda expressions and the filter() function to filter out words from a list that don't start with the letter 's'.

    For example: seq = ['soup','dog','salad','cat','great']

Q9. You are driving a little too fast, and a police officer stops you. Write a function to return one of 3 possible results: "No Challan", "Small Challan", or "Heavy Challan". If your speed is 60 or less, the result is "No Challan". If speed is between 61 and 80 inclusive, the result is "Small Challan". If speed is 81 or more, the result is "Heavy Challan". Unless it is your birthday (encoded as a Boolean value in the parameters of the function) -- on your birthday, your speed can be 5 higher in all cases.

caught_speeding(81,True)

caught_speeding(81,False)

Q10. Concatenate two lists index-wise
list1 = ["M", "na", "i", "She"]

list2 = ["y", "me", "s", "lly"]

Expected Outcome: ['My', 'name', 'is', 'Shelly']

Q11. Concatenate two lists in the following order

list1 = ["Hello ", "take "]

list2 = ["Dear", "Sir"]

Expected Output: ['Hello Dear', 'Hello Sir', 'take Dear', 'take Sir']

Q12. Add item 7000 after 6000 in the following Python List

list1 = [10, 20, [300, 400, [5000, 6000], 500], 30, 40]

Q13. Given a Python list, remove all occurrence of 20 from the list

list1 = [5, 20, 15, 20, 25, 50, 20]

Q14. Check if a value 200 exists in a dictionary

d1 = {'a': 100, 'b': 200, 'c': 300}

Q15. Find the sum of the series 2 +22 + 222 + 2222 + .. n terms