

# Week 7 Quiz

Assignment not submitted

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All questions carry equal weightage. All Python code is assumed to be executed using Python3. You may submit as many times as you like. Your final submission will be graded.

**Note:**

- If the question asks about a value of type `string`, remember to enclose your answer in single or double quotes.
- If the question asks about a value of type `list`, remember to enclose your answer in square brackets and use commas to separate elements.

1) Given the following permutation of a,b,c,d,e,f,g,h,i,j, what is the **previous** permutation in lexicographic (dictionary) order? Do not use blank spaces between letters.

fjadchbegi

2) Assume we have defined a class `Node` that implements user defined lists of numbers. Each object node of type `Node` has attributes `node.value` and `node.next` with the usual interpretation. We want to add a function `sum()` to the class `Node` which will compute the sum of the numbers in the list. Below is an incomplete implementation of `sum()` given below. What should be put in place of XXX and YYY?

```
def sum(self):  
    if self.value == None:  
        return(0)  
    elif self.next == None:  
        return(XXX)  
    else:  
        return(YYY)
```

- ☐ Replace XXX by 1 and YYY by `1 + self.next.sum()`
- ☐ Replace XXX by 1 and YYY by `self.value + self.next.sum()`
- ☐ Replace XXX by `self.value` and YYY by `1 + self.next.sum()`
- ☐ Replace XXX by `self.value` and YYY by `self.value + self.next.sum()`