

lec4

August 12, 2016

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In [ ]: #You have a list fruits:
        fruits=['orange', 'pineapple', 'banana', 'mango']
        #Can you give me 2 things?
        #1. a list called my_fruits
        #my_fruits=['my_orange', 'my_pineapple', 'my_banana', 'my_mango']

        #I saw The following solutions before:
        my_fruits=[]
        my_fruits += ['my'+fruits[0]]
        my_fruits += ['my'+fruits[1]]
        #I don't want you to do that.
        #I want you to give me an answer using for loops.

In [ ]: fruits=['orange', 'pineapple', 'banana', 'mango']
        my_fruits = []
        for x in fruits:
            my_fruits += ['my_' + x]
        print my_fruits
        #what does this print?

In [ ]: my_fruits = []
        for x in fruits:
            my_fruits += ['my_' + x]
        print my_fruits
        #what does this print?

In [ ]: #2. I would like you to give me a list called my_favorite_fruits
        #with the elements pineapple and mango
        #so my_favorite_fruits=['pinapple', 'mango']
        my_favorite_fruits = []
        for x in fruits:
            y = [fruits[1]] + [fruits[3]] #['pinapple', 'mango']
            my_favorite_fruits += y #['pinapple', 'mango']
            if x=='orange':
                break
        #my_favorite_fruits += [x]
        print my_favorite_fruits
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In [ ]: #3. give me a variable called best_fruit whose value is 'banana' and whose
#data type is a string:
#best_fruit='banana'
best_fruits = ''
for x in fruits:
    if x=='banana':
        best_fruits = x
        break
#print x
print best_fruits
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In [1]: #one of your classmates came up with this solution.
#what is wrong with this solution?
#print it and see what the output is.
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fruits=['orange', 'pineapple', 'banana', 'mango']
my_favorite_fruits=[]
for x in fruits:
    #x is banana
    #y=['pinapple'+'mango']
    y=[fruits[1]+fruits[3]]
    my_favorite_fruits += y
print my_favorite_fruits
```

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['pineapplemango', 'pineapplemango', 'pineapplemango', 'pineapplemango']
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In [ ]: #What is printed?
fruits=['orange', 'pineapple', 'banana', 'mango']
for x in fruits:
    if x=='pineapple':
        print x
        continue
```

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In [ ]: #Can you give me a function called reverse, that takes in an input string
#And returns the reversed version of the string.
#For example, if the input is abcde it returns edcba.
#This will give you an exercise using len and range
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In [ ]: #One solution that one of your classmates came up with
def reverse(input_string):
    z=0
    n=''
    for x in input_string:
        y=input_string[len(input_string)-1-z] #z=0
        z += 1
        n += y
    return n
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In [5]: #Another solution
def reverse(x):
    y=''
    for i in range(len(x)):
        y += x[len(x)-i-1]
    return y
d=reverse('abcdeghefggig')
print d
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giggfehggedcba

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In [ ]: #What is the difference between these 2 solutions?
        #Which solution is better?
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