Jeopardy

Python Topics
<table>
<thead>
<tr>
<th>Syntax</th>
<th>Lists</th>
<th>Functions</th>
<th>Comprend</th>
<th>Potpourri</th>
</tr>
</thead>
<tbody>
<tr>
<td>200</td>
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QUESTION:

• This is how you obtain a random integer in [32..212]

ANSWER:

• What is random.randint(32, 212)?
QUESTION:

• This is how you get both the indices and corresponding elements in a list L.

ANSWER:

• What is: for i, e in enumerate(L)?
QUESTION:

• Syntax to apply a function foo to every element of list L.

ANSWER:

• What is: map(foo, L)?
QUESTION:

• A way to create a new list L2 from existing list L1 without using a comprehension.

ANSWER:

• What is: L2 = copy.deepcopy(L1)?
QUESTION:

• The cardinal sin of Python programming.

ANSWER:

• What is camel case naming? (I’ll also accept anything else related to Java.)
QUESTION:

• This is one line of code to create a list L of 50 zeros without a comprehension.

ANSWER:

• What is: \( L = [0] \times 50? \)
QUESTION:

• This is how you remove the element with index 8 from list L.

ANSWER:

• What is: del L[8] or L.pop(8)?
QUESTION:

• This is how you create list L2 consisting of the first 100 elements of L1.

ANSWER:

• What is: L2 = L1[:100]?
QUESTION:

• A single command (not a comprehension) to add the elements of L2 to the end of L1.

ANSWER:

• What is: L1.extend(L2)?
QUESTION:

• How to sort a list L of tuples into decreasing order by the 0\textsuperscript{th} element of each tuple.

ANSWER:

• What is: $L2 = \text{sorted}(L, \text{key} = \lambda e: e[0], \text{reverse} = \text{True})$?
QUESTION:

• The way you specify the types of the parameters in a Python function.

ANSWER:

• What is “you don’t”? 
QUESTION:
def foo(x, y):
    y += 1
    x = x * y

x = 3
foo(x, 5)

The value of x after the function call.

ANSWER:

• What is 3?
QUESTION:

• The signature for a function foo that takes two parameters, the second of which has a default value in [0.0, 1.0).

ANSWER:

• What is: foo(x, y=random.random())?
QUESTION:

• Function foo includes the following statement:
  return 10, 20
  The value of x after the call: x = foo()

ANSWER:

• What is the tuple (10, 20)?
QUESTION:

• Function foo includes the following statement:
  return 10, 20
The result of the call: x, y, z = foo()

ANSWER:

• What is: ValueError: need more than 2 values to unpack?
QUESTION:

• A comprehension is a way to create a list without the use of another list.

ANSWER:

• What is false?
QUESTION:

• The element of a comprehension that makes the length of the resulting list unpredictable.

ANSWER:

• What is filtering?
QUESTION:

• A comprehension that creates a list of strings, ‘even’ or ‘odd’ indicating the parity of each element in nums, a list of integers.

ANSWER:

• What is: [0 if e % 2 == 0 else 1 for e in nums]?
QUESTION:

• Let permute(L) be a function that permutes list L. A comprehension that creates a list of 10 permutations of list L1.

ANSWER:

• What is: [permute(L1) for _ in range(10)]?
QUESTION:

• A comprehension that includes the least significant digit of each even number > 0 and the two least significant digits of each odd number > 0 in list data.

ANSWER:

• What is

  \[\{e \mod 10 \text{ if } e \mod 2 == 0 \text{ else } e \mod 100 \text{ for } e \text{ in data if } e > 0\}\]?
QUESTION:

• The command to see which files have changed in your local git repository.

ANSWER:

• What is: git status?
QUESTION:

• A command to pair elements in lists L1 and L2.

ANSWER:

• What is: zip(L1, L2)
QUESTION:

• A command to determine the number of occurrences of ‘do’ in the title of a Police song.

ANSWER:

• What is: ‘de do do do de da da da da’.count(‘do’)?
QUESTION:

• Let data be a list of lists of integers. The result of:
  [x for L in data for x in L]

ANSWER:

• What a single list containing all of the elements in data?
QUESTION:

• The bands/singers represented in the lecture on strings.

ANSWER:

• What are the Beach Boys, the Beatles, Bob Dylan, Chicago, and the Police?