Clicker Questions for L14: Debugging

Questions for 2017-03-28
Q1: Where’s the syntax error?

Image we have the following code in python:

```python
1 def decimate(in_list, ordinal):
    """(list, int) --> list
    Returns a new list from which the ordinal- the elements have been removed.
    Examples:
    ordinal = 2: remove every second element.
    ordinal = 10: remove every tenth element.
    """
2     out_list = in_list[:]
3     for i in range(0, len(out_list), ordinal)
4         out_list.remove(in_list(i))
5     return out_list

a = decimate([2, 4, 6, 8, 10, 12, 14], 3)
```

Which line contains the syntax error?

A. 1
B. 2
C. 3
D. 4
E. 5
Q2: Where’s the runtime error?

Image we execute the following code in python (having corrected the syntax error from the previous question):

```python
1  def decimate(in_list, ordinal):
   """(list, int) --> list
   Returns a new list from which the ordinal-the elements have been removed.
   Examples:
   ordinal = 2: remove every second element.
   ordinal = 10: remove every tenth element.
   """
   2      out_list = in_list[:]
   3    for i in range(0,len(out_list), ordinal):
   4         out_list.remove(in_list(i))
   5      return out_list

a = decimate([2, 4, 6, 8, 10, 12, 14], 3)
```

Which line contains the run-time error?

A. 1
B. 2
C. 3
D. 4
E. 5
def decimate(in_list, ordinal):
    """(list, int) --> list
    Returns a new list from which the ordinal-th elements have been removed.
    Examples:
    ordinal = 2: remove every second element.
    ordinal = 10: remove every tenth element.
    """
    out_list = in_list[:]
    for i in range(0, len(out_list), ordinal):
        out_list.remove(in_list[i])
    return out_list

a = decimate([2, 4, 6, 8, 10, 12, 14], 3)
Q4: Where’s the semantic error?

Image we execute the following code in python (having corrected the errors from the previous questions):

```python
1 def decimate(in_list, ordinal):
    """(list, int) --> list
    Returns a new list from which the ordinal - the elements have been removed.
    Examples:
    ordinal = 2: remove every second element.
    ordinal = 10: remove every tenth element.
    """
2     out_list = in_list[:]
3     for i in range(0, len(out_list), ordinal):
4         out_list.remove(in_list[i])
5     return out_list

a = decimate([2, 4, 6, 8, 10, 12, 14], 3)
```

Which line is leading to the semantic error?

A. 1  
B. 2  
C. 3  
D. 4  
E. 5