CSC148 Worksheet 16 Solution

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Question 1

a. The doctests for the base case is

```
1    """
2    >>> nested_list_contains(1,1)
3    True
4    >>> nested_list_contains(1,2)
5    False
6    """
7
```

Using this fact, we can write

```
1    from typing import Union, List
2
3    def nested_list_contains(obj: Union[int, List], item: int) -> bool:
4        """Return whether the given item appears in <obj>.
5        Note that if <obj> is an integer, this function checks whether
6        <item> is equal to <obj>.
7
8        >>> nested_list_contains(1,1)
9        True
10       >>> nested_list_contains(1,2)
11       False
12       """
13
14       if isinstance(self, int):
15           return obj == item
16
```

Listing 1: worksheet_16_q1a_solution

Question 2