CS150 L09: Lists - solution

1. What is the value of a after this code runs?

   ```python
   a = [2, 4, 6, 8]
a.remove(4)
a.pop(2)
   ```

   Answer: C
   a.remove(4) removes the value 4, so a becomes [2, 6, 8].
a.pop(2) removes the element in position 2, which is 8.
So after this code runs a is [2, 6].

   A [2, 4]
   B [6, 8]
   C [2, 6]
   D [2, 8]
   E The code produces an error

2. What is the value of a after this code runs? a = [2, 4, 6, 8] a.pop(2) a.remove(4)

   Answer: D
   a.pop(2) removes the element in position 2, which is 6.
a.remove(4) removes the value 4, so a becomes [2, 8].
So after this code runs a is [2, 8].

   A [2, 4]
   B [6, 8]
   C [2, 6]
   D [2, 8]
   E The code produces an error

3. What is the list produced by this code?

   ```python
   list(range(2, 7))
   ```

   Answer: C
   range(2, 7) generates an iterable with the sequence 2,3,4,5,6. When used as the argument for the list
constructor, the result is the list [2, 3, 4, 5, 6].

   A [0, 1, 2, 3, 4, 5, 6]
   B [0, 1, 2, 3, 4, 5, 6, 7]
   C [2, 3, 4, 5, 6]
   D [2, 3, 4, 5, 6, 7]
   E This code produces an error