Working with Lists

Recall that a variable can hold multiple values in the form of a list. The values are separated by commas and wrapped in square brackets.

Lists have ***methods*** (built-in functions) that can be called using dot notation. For example, to add a new element to the end of a list, we can use the **append** method.

Python code	Shell
`rolls = [4, 6, 6, 2, 6]`	
`len(rolls)`	
`print(rolls[5])`	
`rolls.append(1)`	
`print(rolls)`	
`print(rolls[5])`	
`lucky.append(1)`	
`lucky = []`	
`print(lucky[0])`	
`lucky.append(5)`	
`print(lucky)`	
`print(lucky[0])`	
`rolls.count(6)`	
`rolls.remove(6)`	
`print(rolls)`	

1. What is the result of calling the `append` method on a list?

2. What must be defined prior to using a method like `append`?

3. Explain why two lines caused an `IndexError`.

4. What is the result of calling the `remove` method on a list?

5. Give one example of a list method that requires an argument and one that does not.

6. Describe the syntax similarities and differences between using a list method like `append` and Python built-in functions like `print`.

7. Complete the function below (two lines are missing). It should prompt the user for numbers and build a list by adding one number at a time to the end of the list. The loop terminates when the user inputs the number 0.

```
def input_numbers():
    x = 1

    _____________________________
    x = int ( input ("Enter the first number: "))
    while x != 0:

        ___________________________________________
        x = int ( input ("Enter the next number: "))

    return numbers
```