existing [illegible] object? [illegible] a veryLongInt ob

OGRAMMING EXERCISES

Hypothesize the output from the following code, and then test your hypoth
includes the code:

```
ArrayList<String> letters = new ArrayList<String>();

letters.add ("f");
letters.add (1, "i");
letters.add ("e");
letters.add (1, "r");
letters.add ("e");
letters.add (4, "z");
System.out.println (letters);

letters.remove ("i");
int index = letters.indexOf ("e");
letters.remove (index);
letters.add (2, "o");
System.out.println (letters);
```

For each of the following program segments, hypothesize if the segment would generate a compile-time e
a run-time exception, or neither. Then test your hypotheses with a `main` method that includes each segm

a.
```
ArrayList<String> myList = new ArrayList<String>();
myList.add ("yes");
myList.add (7);
```

b.
```
ArrayList<Double> original = new ArrayList<Double>();
original.add (7);
```

c.
```
ArrayList<Integer> original = new ArrayList<Integer>();
double x = 7;
original.add (x);
```

d.
```
ArrayList<String> newList = new ArrayList<String>();
newList.add ("yes");
Integer answer = (Integer)newList.get (0);
```

Suppose we have the following code:

```
ArrayList<String> myList = new ArrayList<String>();

myList.add ("Karen");
myList.add ("Don");
myList.add ("Mark");

ArrayList<String> temp = new ArrayList<String> (myList);
ArrayList<String> sameList = myList;

myList.add (1, "Courtney");
```

Hypothesize what the contents of `myList`, `temp`, and `sameList` will be after this last insertion. Then te
your hypothesis with a `main` method that includes the code.

Hypothesize what will happen when the following