Java
Tracing ArrayList Worksheet #1

Name -
Period -

Show the `ArrayList` as it is constructed similar to how examples in the lecture notes and demo programs are annotated with comment statements. See the instructor if you have questions. Explain any errors and skip to the next statement.

1.
```
ArrayList <String> snacks = new ArrayList<String>();
snacks.add("raisins");       //  raisins
snacks.add("bananas");       //  raisins, bananas
snacks.add("crackers");      //
snacks.add(2, "grapes");     //
snacks.add("plums");         //
snacks.remove(0);            //
snacks.set(1, "figs");       //
snacks.remove(2);            //
System.out.println(snacks);  // output here:
```

2.
```
ArrayList <String> snacks = new ArrayList<String>();
snacks.add("raisins");              //
snacks.add("bananas");              //
snacks.add("oreos");                //
String mySnack = snacks.get(1);     // mySnack is:
snacks.add(mySnack);                //
snacks.set(4, "carrots");           //
System.out.println(snacks.get(0));  // output is:
snacks.remove(0);                                   //
System.out.println(snacks.remove(0));               // output is:
System.out.println(snacks.size());                  // output is:
System.out.println(snacks.get(snacks.size() - 1));// output is:
```

3.
```
ArrayList <String> shoppingCart = new ArrayList<String>();
String box = "Wheaties";
shoppingCart.add(box);           // Wheaties
shoppingCart.add("bananas");     // Wheaties, bananas
shoppingCart.add("crackers");    //
String jar = “Ragu”;
shoppingCart.set(1, jar);        //
String snack = “Fritos”;
shoppingCart.add(2, snack);      //
System.out.println(shoppingCart.remove(0));// output is:
String dairy = “milk”;
shoppingCart.set(1, dairy);
System.out.println(shoppingCart); // output is:
```

4.
```
ArrayList <String> snacks = new ArrayList<String>();
snacks.add("raisins");
snacks.add("bananas");
snacks.add("oreos");
int count = 0;                      //  trace count here---------------> count
for (String x : snacks)
   if (x.substring(3, 4).equals("a"))
      count++;
System.out.println(count);          //
```