Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**ArrayList Assignment**

1. What is an ArrayList? In what cases would you use an ArrayList rather than an array?

An arraylist is a collection in java.util that allows for storing of objects

1. What is a wrapper class? What is the difference between an int and an Integer?

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1. Consider the following code segment.

List<String> list = new ArrayList<String>();

list.add("P");

list.add("Q");

list.add("R");

list.set(2, "s");

list.add(2, "T");

list.add("u");

System.out.println(list);

What is printed as a result of executing the code segment? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Solve the following ArrayList mystery. What is the output from the following code?

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ArrayList<Integer> list = new ArrayList<Integer>();

for (int i = 1; i <= 10; i++) {

list.add(10 \* i); **// [10, 20, 30, 40, ..., 100]**

}

for (int i = 0; i < list.size(); i++) {

list.remove(i);

}

System.out.println(list);

1. The code that follows does not compile. Why not? Explain how to fix it.

ArrayList<int> numbers = new ArrayList<int>();

numbers.add(7);

numbers.add(19);

System.out.println(numbers);

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1. When the code that follows runs on an ArrayList of Strings, it throws an exception. Why?

for (String s : words) {

System.out.println(s);

if (s.equals(“hello”)) {

words.add(“goodbye”);

}

}

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