

**AP Chapter 13 Lab 2 ArrayLists and Arrays**

Pts: 10

Name \_\_\_\_\_

Class Hr \_\_\_\_\_

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I. A) Common Error (13.2 pp. 525-526)

1) a) Open Animal4b.java, Canine4b.java, Dog4b.java, and Cat4b.java and then Run **AP1ch13lab02aTest.java**

b) Complete the output below:

clifford the dog weighs \_\_\_\_\_ lbs.

lassie the dog weighs \_\_\_\_\_ lbs.

fido the dog weighs \_\_\_\_\_ lbs.

rover the dog weighs \_\_\_\_\_ lbs.

\_\_\_\_\_ sleep in a doghouse.

\_\_\_\_\_ sleep in a doghouse.

\_\_\_\_\_ sleep in a doghouse.

\_\_\_\_\_ sleep in a doghouse.

\_\_\_\_\_ the cat weighs \_\_\_\_\_ lbs.

\_\_\_\_\_ sleep all day.

Bye

2) a) Look at the code and the output of **AP1ch13lab02aTest.java** to answer:

1a) What object is the one that calls the sleep( ) method from inside the **for** loop?

\_\_\_\_\_

b) This object is of what Class type?

\_\_\_\_\_

2a) What object is the one that calls the last sleep( ) method?

\_\_\_\_\_

b) This object is of what Class type?

\_\_\_\_\_

3) a) Delete the line **y.sleep( );**

b) Change the line **Cat4b y = (Cat4b)myList.get(myList.size( )-1);** to **Cat4b y = myList.get(myList.size( )-1);** then Run

c) Do you get an error? (yes/no)

\_\_\_\_\_

d) Change the line **Cat4b y = myList.get(myList.size( )-1);** to **Object y = myList.get(myList.size( )-1);** then Run

e) Do you get an error? (yes/no)

\_\_\_\_\_

**OVER**

II. A) Storing Numbers in ArrayLists(13.3 p. 530)

1) a) Open and Run **AP1ch13lab02b.java** and complete the output below:

First Loop:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Second Loop:

Position \_\_\_\_\_ has a value of \_\_\_\_\_

Position \_\_\_\_\_ has a value of \_\_\_\_\_

Position \_\_\_\_\_ has a value of \_\_\_\_\_

Position \_\_\_\_\_ has a value of \_\_\_\_\_

Position \_\_\_\_\_ has a value of \_\_\_\_\_

Third Loop:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Bye

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2) Look at the code and the output of **AP1ch13lab02b.java** to answer:

a) What is the name of the ArrayList in this program? \_\_\_\_\_

b) In the First Loop in the **System.out.println( )** line what is the object that is used to output the 5 numbers? \_\_\_\_\_

c) xObject is of what Class? \_\_\_\_\_

\*Note: Integer along with Double and Boolean are called wrapper classes and are used to make a primitive number into an object since only objects can be stored in an ArrayList.

d) In the Second Loop is xObject used in the **System.out.println( )** line? \_\_\_\_\_

e) What was the index of the value that was removed before doing the Third Loop? \_\_\_\_\_

3) Complete the following to output from an ArrayList of 100 items called newList the 10<sup>th</sup> item (Note: Be careful, I want math position 10)

**System.out.println(\_\_\_\_\_);**

**Turn in this sheet to be graded!**