**Computer Science AP**

**ArrayList Practice Problems**

\*These problems require you to use the Project called *ArrayListPractice* \*

Code solutions to these ArrayList problems.

1. Use the MoveAround class for this problem. Move the first number in the ArrayList nums to the end of the list. Print out the list afterwards to check that it worked.
2. Use the MoveAround class for this problem. Move the last number in the ArrayList nums2 to the beginning of the list. Print out the list afterwards to check that it worked.
3. Use the WordCopy class for this problem.
Create an ArrayList of Strings called *words*. Add a few words to this list.
Create a second ArrayList called *copies.*
Write the code that would use a for loop to read all the Strings in *words* and place the same words into the *copies* ArrayList. Once done, print out all the values in *copies* to make sure it worked.
4. Use the FriendsSelected class for this problem.
Create an ArrayList of Strings called *friends*. Add a 6 names to this list.
Create an ArrayList of Strings called *selected.* Leave it empty for now.
Pick a random number that is a valid index position in the ArrayList (for this example, 0-5 will work).
Remove the selected friend from the friends list and add them to the selected list.
5. Examine the class called Racer.
Notice that each Racer is given a random best race time when created (for testing purposes).
Complete the code in the BestRacers class so that the *fastRacers* ArrayList will contain all Racers that can run the 100 meter dash in a time of 13 seconds or less. Print out the times of the racers in the list so that you can confirm your code worked!
6. Continue the problem above.
Now that *fastRacers contains* some fast Racers, write the code that will loop through the list and determine the idNumber of the fastest racer (the racer with the lowest time!) in the list.