Problem Set

1. Create an ArrayList of type String to store names. Add five names to the list, and then print each name using a for loop.
2. Create an ArrayList of type Integer to store numbers from 1 to 10. Print the size of the list and access the third element using the get() method.
3. Create an ArrayList of type String to store five city names. Remove the third city from the list and print the modified list.
4. Create an ArrayList of type Integer to store numbers from 1 to 5. Check if the list contains the number 3 and print a message accordingly.
5. Create an ArrayList of type Double to store five floating-point numbers. Use an enhanced for loop to iterate over the list and print each number.
6. Create an ArrayList of type String to store five fruit names. Sort the list in alphabetical order using Collections.sort() and print the sorted list.
7. Create an ArrayList of type Integer to store numbers from 1 to 10. Use Collections.reverse() to reverse the list, and then print the reversed list.
8. Create an ArrayList of type String that contains some duplicate names. Write a method to remove duplicate names from the list and print the unique list.
9. Create two ArrayLists, one of type String that contains five country names and another of type String that contains five city names. Merge these two lists into one and print the resulting list.
10. Create a class Book with properties like title and author. Create an ArrayList of type Book to store five books. Print the title and author of each book in the list.
11. Create an ArrayList of type Integer that contains several occurrences of the number 5. Write a method to remove all occurrences of 5 from the list and print the modified list.