The Member class represents a member of a social club. Each member has a name and a list of friends (where friends are stored as Strings).

```java
public class Member {
    private String myName;
    private ArrayList<String> myFriends; // List of String objects

    public void messageFriends(String message) {
        for (String recipient : myFriends) {
            sendMessage(message, recipient);
        }
    }

    private void sendMessage(String message, String recipient) {
        System.out.println("Message " + message + " to " + recipient);
    }
}
```

1. Add to class Member a new private field called myType as an enumerated type named Membership that represents two types of members (SILVER, GOLD).

2. Modify the Member class to implement the Comparable interface by adding a compareTo() method to compare Member objects based on their Membership type. A SILVER member is considered "smaller" than a GOLD member. Two members of the same memberType are considered equal.

3. Modify the myFriends field using generics so that it is an ArrayList of Strings, then implement the method messageFriends() so that it invokes the sendMessage() method for each friend in the myFriends ArrayList. The only iteration method you are allow to use is the enhanced for loop construct (you cannot use whiles, do whiles, or traditional for loops).

4. Modify the method sendMessage() to throw an IllegalArgumentException if the recipient is null. Modify messageFriends() to catch any exceptions thrown by the method sendMessage(). Use System.out.println to print the string "Exception!" if an exception is caught.