Module 4 - Exercise 1 Program: This program will have the Roomba drive forward until a virtual wall is detected. Once the wall is detected, the Roomba will turn around and drive forward until a bump sensor is hit. As soon as that happens, the roomba will stop.

```java
import roomba.roombanetwork.services.userservice.*;

public class MyRoombaProgram{

    public static void main(String [] args){
        UserService.setServerAddress("localhost");
        UserService.setName("Your Name");

        Roomba roomba = new Roomba();
        roomba.forwardSpeed(.3);
        roomba.waitForVirtualWall();
        roomba.turn(180);
        roomba.forwardSpeed(.3);
        roomba.waitForBump();
        roomba.forwardSpeed(0);

        UserService.disconnect();
        System.exit(1);
    }
}
```
Module 4 - Exercise 2 Program: This program will have the Roomba spin until it has been picked up. As soon as that happens, the motors will stop and the Roomba will play a song.

```java
import roomba.roombanetwork.services.userservice.*;

public class MyRoombaProgram {

    public static void main(String[] args) {
        UserService.setServerAddress("localhost");
        UserService.setName("Your Name");

        Roomba roomba = new Roomba();

        roomba.turnSpeed(.3);

        // Wait until the wheels drop
        while (!roomba.getLeftWheelDrop() && !roomba.getRightWheelDrop() && !roomba.getCenterWheelDrop()) {
            try {
                Thread.sleep(10);
            } catch (Exception e) {
            }
        }

        roomba.turnSpeed(0);

        // Play the song
        roomba.clearSong();
        roomba.addSongNote(39, 32);
        roomba.addSongNote(40, 16);
        roomba.addSongNote(0, 16);
        roomba.addSongNote(39, 32);
        roomba.addSongNote(40, 16);
        roomba.addSongNote(0, 16);
        roomba.addSongNote(39, 16);
        roomba.addSongNote(40, 16);
        roomba.addSongNote(0, 16);
        roomba.addSongNote(39, 16);
        roomba.addSongNote(40, 16);
        roomba.addSongNote(0, 16);
        roomba.addSongNote(39, 16);
        roomba.addSongNote(40, 16);
        roomba.addSongNote(0, 16);
        roomba.addSongNote(39, 16);
        roomba.addSongNote(40, 16);
        roomba.addSongNote(0, 16);
        roomba.addSongNote(39, 16);
        roomba.addSongNote(40, 16);
        roomba.addSongNote(0, 16);
        roomba.addSongNote(39, 16);
        roomba.addSongNote(40, 16);
        roomba.addSongNote(0, 16);
        roomba.playSong();

        UserService.disconnect();
    }
}
```
System.exit(1);
Module 4 - Exercise 3 Program: This program will have the Roomba drive forward until it detects something. If an object is detected through the bump sensors, the Roomba will turn around and drive forward for 1 meter. If a virtual wall is detected, the Roomba will turn 90 degrees to the right and stop.

```java
import roomba.roobanetwork.services.userservice.*;

public class MyRoombaProgram{
    public static void main(String [] args){
        UserService.setServerAddress("localhost");
        UserService.setName("Your Name");

        Roomba roomba = new Roomba();
        roomba.setForwardSpeed(.3);

        while (!roomba.getLeftBump() || !roomba.getRightBump() || !roomba.getVirtualWall()){
            try{
                Thread.sleep(10);
            }catch (Exception e){
            }
        }

        if (roomba.getLeftBump() || roomba.getRightBump()){  
            roomba.setForwardSpeed(0);  
            roomba.turn(180);  
            roomba.drive(1);
        } else if (roomba.getVirtualWall()){  
            roomba.setForwardSpeed(0);  
            roomba.turn(90);
        }

        UserService.disconnect();  
        System.exit(1);
    }
}
```