



QA Assignment

We had a new and junior C++ developer at holoplot and we asked him to make a command line application which implements the following specification:

In the Holoplot frontend software we define an “Audio Source” which can be played back through different [Orion](#) systems, the Holoplot Audio hardware units. Each Orion runs what we call the backend software, to which the frontend talks to configure its settings.

We want to create a game called BingBangBoom for which we set up two Orion systems, A and B. In the Holoplot Backend software, there is a piece of code that plays back either a “Bing”, “Bang” or “Boom” sound on the two systems, according to how the audio source is linked to the two systems in the frontend software. The possible scenarios are:

- The audio source is linked to Orion A (scenario below): play a “Bing” sound
- The audio source is linked to Orion B: play a “Bang” sound
- The audio source is linked to both Orion A and Orion B: play a “Boom” sound
- The audio source is not linked: play back a “Meh” sound

In the Frontend we also define simple integer variable called **srcReference** in the range of 0 and 100 which defines the audio source link to an Orion system as follows:

- if **srcReference** can be divided by 4: source should be linked to Orion A
- if **srcReference** can be divided by 3: source should be linked to Orion B
- if **srcReference** can be divided by 3 and by 4: source should be linked to Orion A&B
- if **srcReference** cannot be divided by 3 or by 4: source is not linked

We want a command line application which allows the user to:

1. Immediately calculate and show the sound output for a given input **srcReference**
2. Store a given **srcReference** for later usage
3. Load a **srcReference** that was previously stored, calculate and show the sound output

The developer created the command line applications which are also included in this zip file.

It is your task to test this application for correctness and then automate this black-box testing. Use whichever programming language and tool you want to automate the testing, but provide all the steps needed for running this tool.

Important: please do not publish your implementation publicly, we don't want other candidates to copy your implementation.