Guide to Installing the Java Applet Arena & Participating in SRMs

This guide will explain how to do the following :

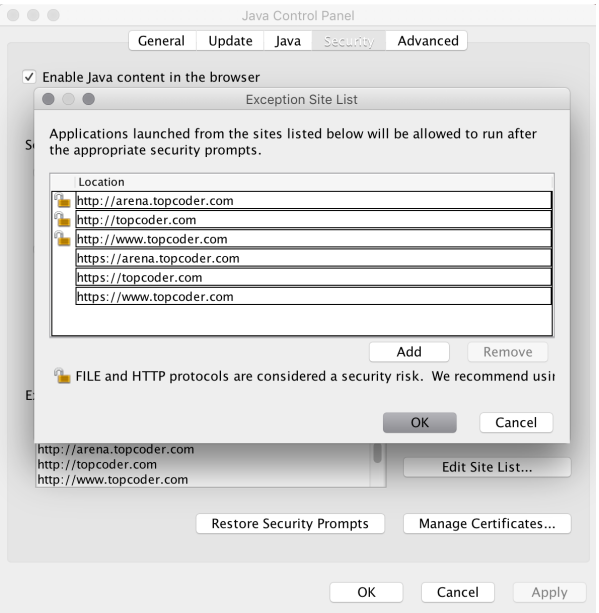
Setting up the Applet

- First you must have JRE (Java Runtime Environment) downloaded. You can download the latest version from here.
- Follow this guide to setup the environment for Java.
- Download the Topcoder Applet from here http://topcodr.co/javaarena
- It is recommended that you move the downloaded file to a folder of its own called “Topcoder Applet”.
- Click on the file to Launch The Applet.

Java Security Warning!

If you get a security warning after installing Java, add Topcoder to the Exception Site List:

Windows	Control Panel → Java → Security → Exception List
OSX	System Preferences → Java → Security → Exception List
LInux, Unix, Solaris, FreeBSD	1. Open a terminal and execute the following command: /usr/bin/jdk1.8.0_05/bin/ControlPanel 2. Replace /usr/bin/jdk1.8.0_05 by the path of your Java installation.



Here are the exceptions you have to add:

http://topcoder.com

http://www.topcoder.com

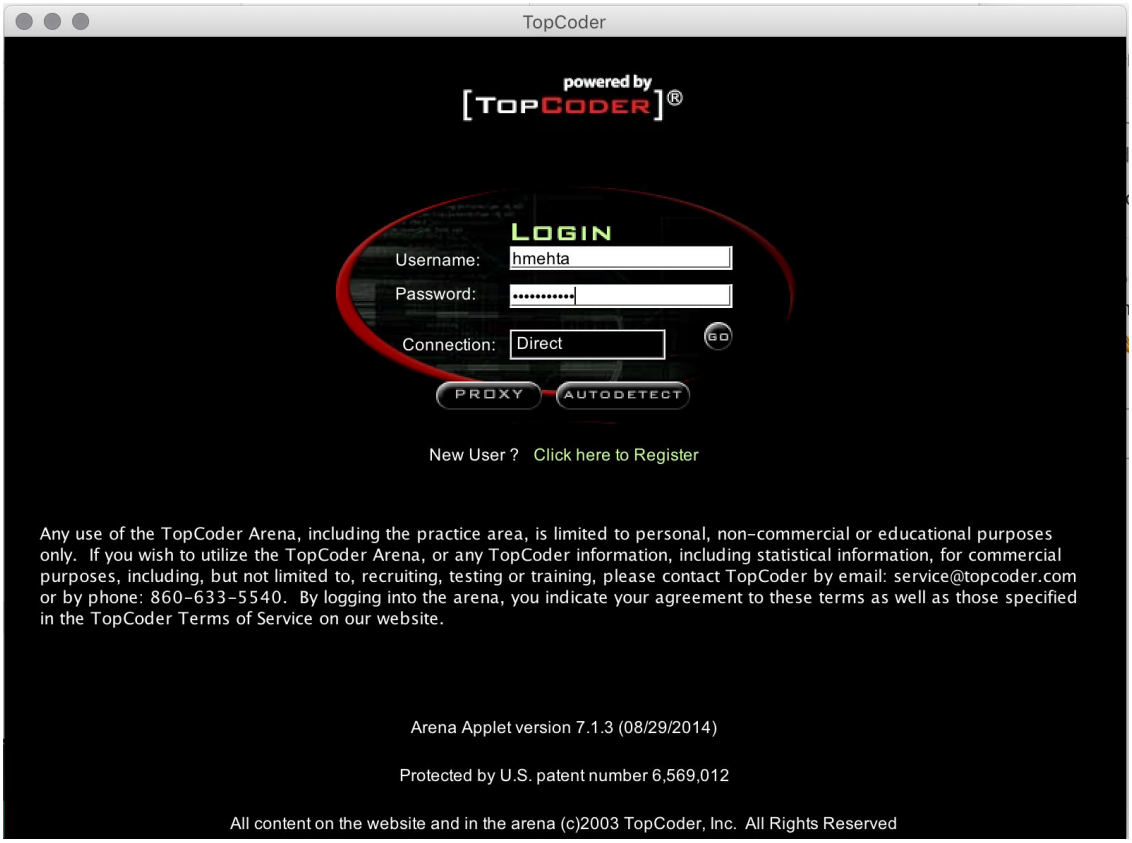
http://arena.topcoder.com

https://topcoder.com

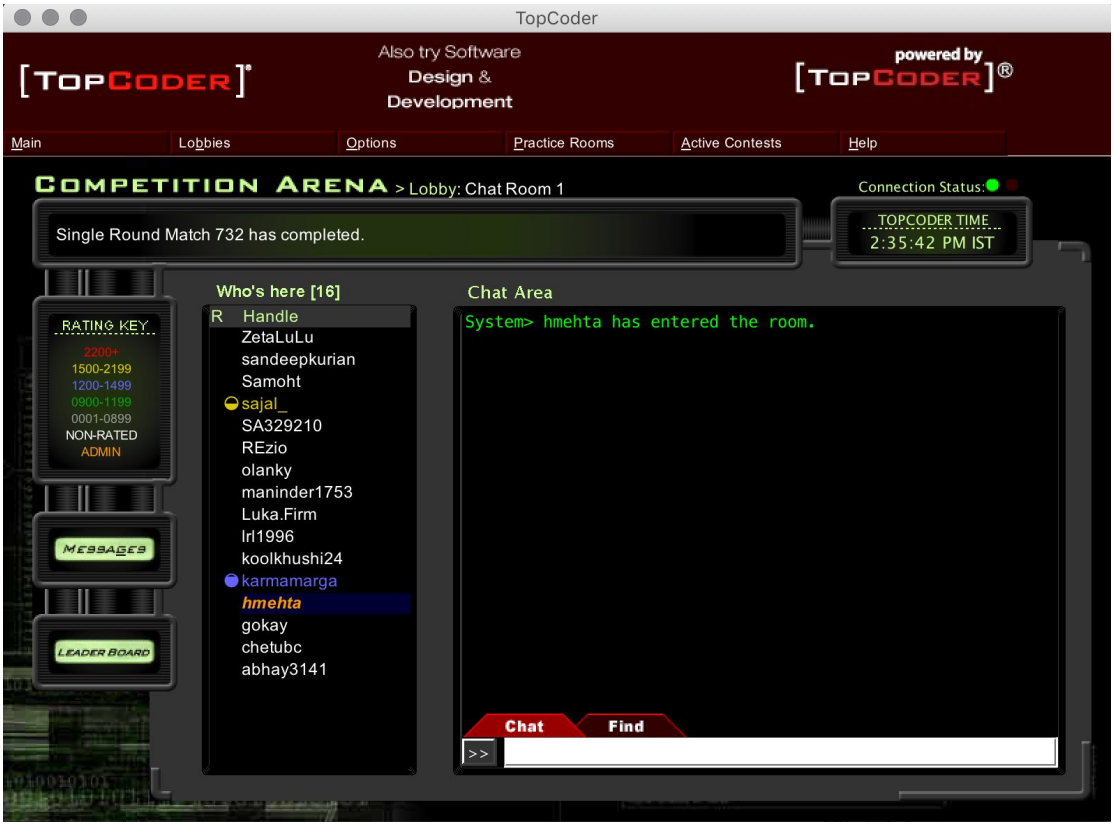
https://www.topcoder.com

https://arena.topcoder.com

Once completed open the Topcoder Applet again and enter your Topcoder handle (username) and password.



You should see the following screen once you have logged in.



Setting up the KawigiEdit Plugin (optional)

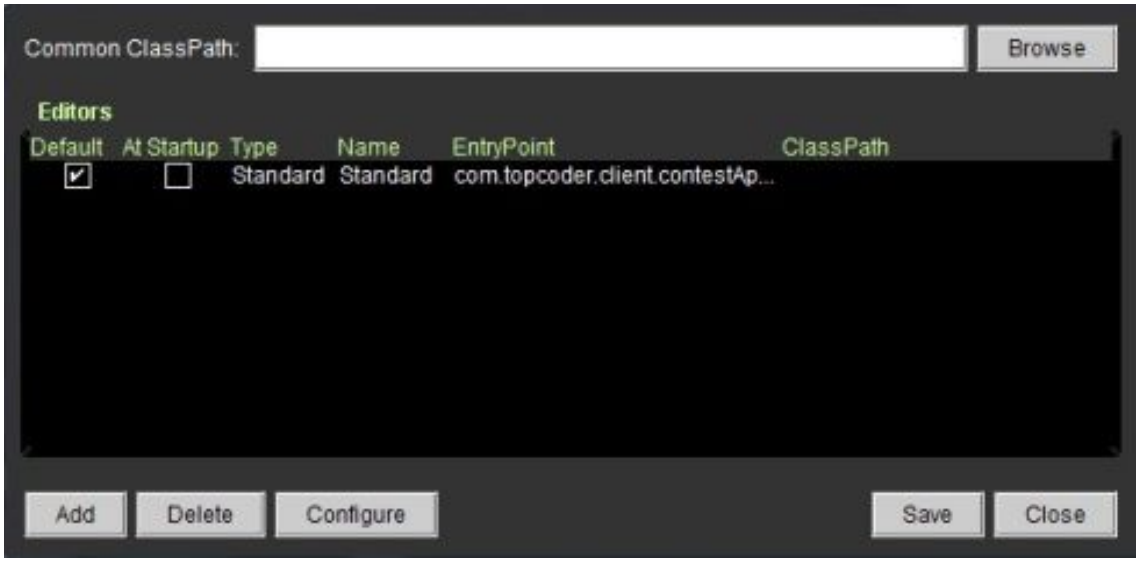
This plugin is very useful and could save you time during SRM competitions because remember that your score is based on the time you complete the problem.

The Topcoder Arena does not rely on standard IO. It requires a function inside of a class and this function takes the parameters as the input, and returns the output.

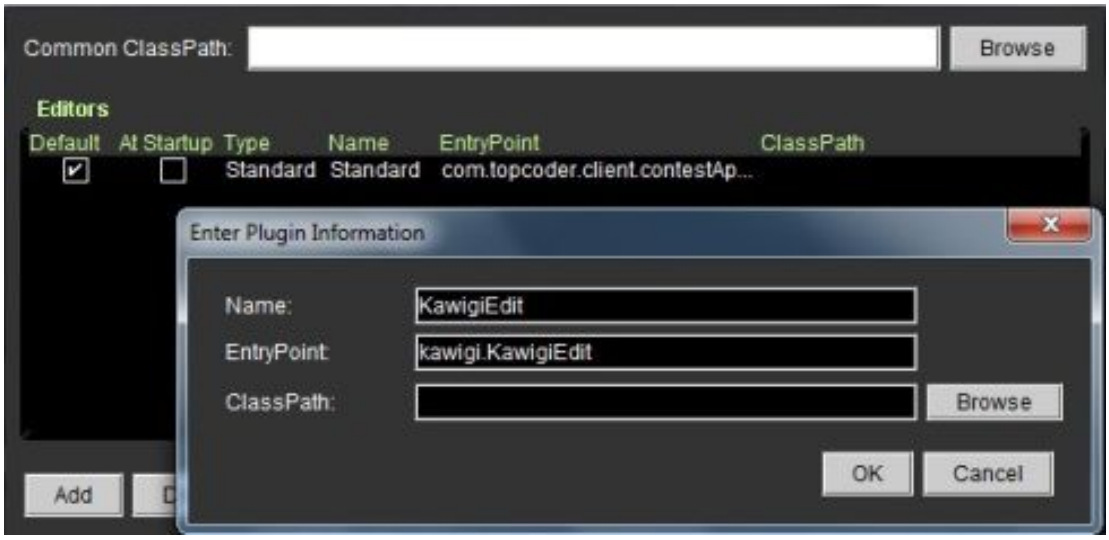
Fortunately, KawigiEdit does most of this for us so just choose your prefered language from the top (C++ in our case), and get back to the code area below.

The KawigiEdit plugin has plenty of features, but we will only discuss some of them and how to set it up properly.

- Download the plugin : http://topcoder.yajags.com/KawigiEdit_2.1.jar
- It's recommended that you put the file in the same directory of the Arena (in the "Topcoder Arena" folder from earlier)
- Start the Topcoder Arena applet (if it is not already running).
- From the Options menu, choose "Editor". The editor preferences dialog should come up.



- Click on the “Add” button and a dialog titled “Enter Plugin Information” should pop up.

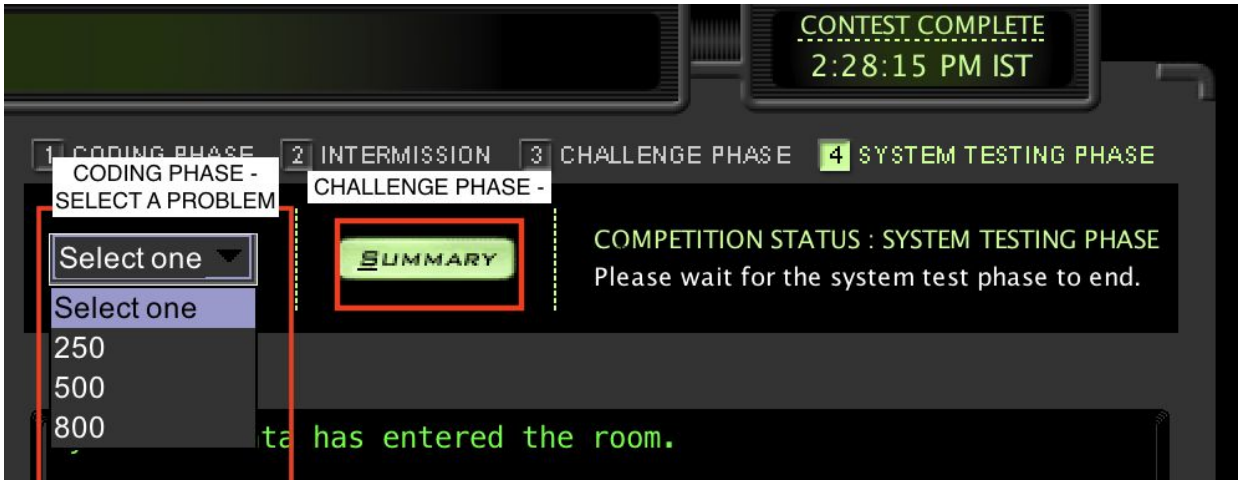


- Fill in the fields with the following information
    - Name : “KawigiEdit”
    - EntryPoint : “kawigi.KawigiEdit”
- Click on “Browse” and navigate to your “Topcoder Applet” folder and select the KawigiEdit_x.jar file
- Click OK and return to the Editor Preferences dialog
- Check the “Default” box on the KawigiEdit line.
- Click “Save” and close.

Practice Problems From Previous SRMs

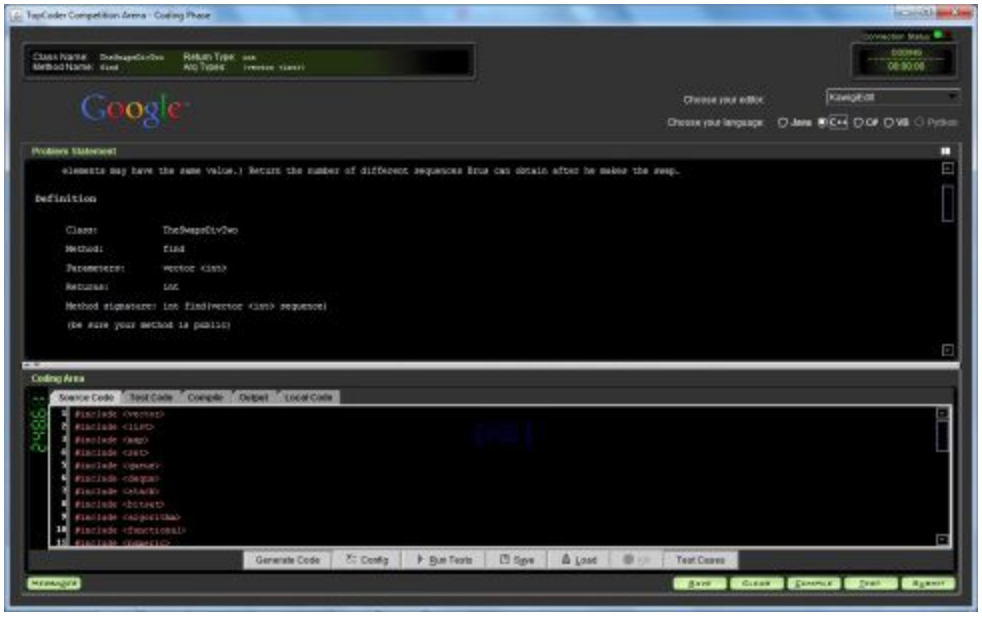
If you are not yet ready to compete, want to practice for an upcoming SRM, or need to prepare for your technical job interview, we have a large library of problems taken from past SRMs that you can attempt and we'll show you how:

- Open the applet and from the top of the menu choose "Practice Rooms" then choose "SRMs"
    - **note** Div 2 rooms are typically easier to solve than Div 1
- In this example we will open SRM 575 Div2 and this is what you should see:



- To open a problem, click on the "Select One" dropdown and choose
    - The values you see are the maximum number of points you can achieve for that one problem. The lower the amount of points the easier the problem should be in comparison to the others.

This is what the Problem Window looks like:



- The Problem Statement is composed of
    - The Problem Description
    - The Definition (KawigiEdit handles most of this in the Coding Area)
    - The Constraints: specifications of the inputs as well as their limits
    - Examples

- If you would like to use KawigiEdit then you may select it In the top right area in the “Choose your editor” dropdown. This will automatically create the header files, class, and function you need to start coding.

- Also be sure to choose your prefered language which appears underneath the editor dropdown.

- Now you are ready to code the function and return the proper result at the end. You are **not required** to print anything.

- If you feel that you have solved the problem correctly and want to test it, you can feel free to use your favorite IDE to run sample cases against it or you can compile your code by clicking “Compile” at the bottom and running a “Batch Test”, which will run your code against the example inputs from the Problem Window

- Once you feel confident in your solution, submit your code by clicking “Submit”. Your code will then be run against a larger set of test cases and if your solution passes, you will end up with the resulting amount of points.

Joining an Active SRM

SRMs are scheduled on Topcoder (Events Calendar) and anyone can join **but you have to register for it before it starts.**

You must register 5 mins before the SRM to make sure you are officially in

To Register:

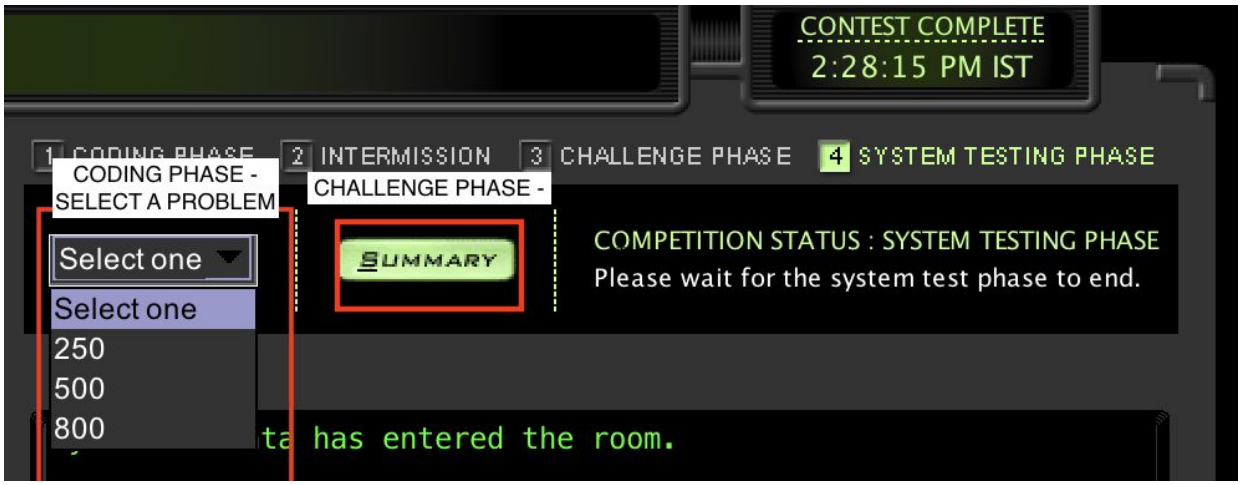
- From the top of the menu choose “Active Contests”
- Select the SRM
- Click “Register”

When the SRM begins enter the room:

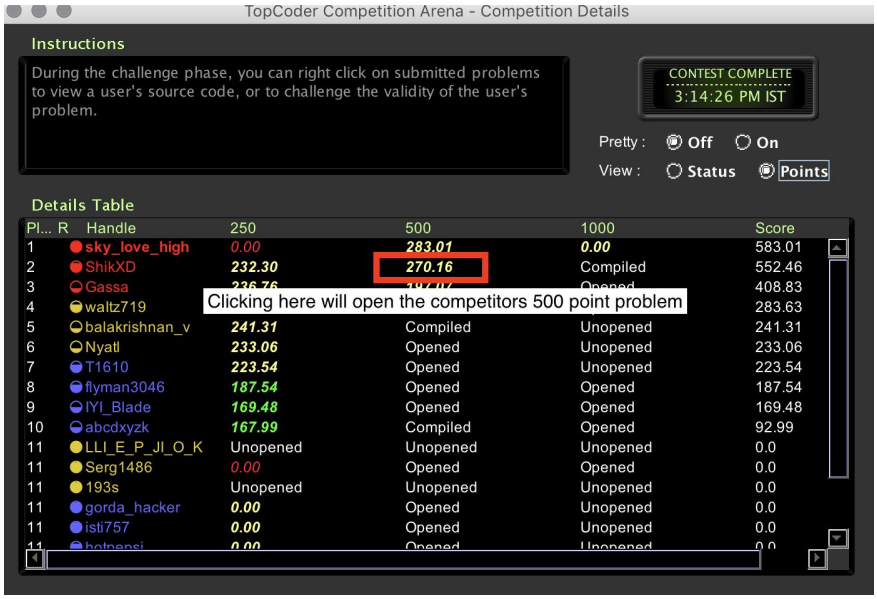
- From the top of the menu choose “Active Contests”
- Select the SRM
- Click “Enter”

SRMs consist of four phases:

1. **Coding Phase**: In this phase you’ll be solving the problems just as mentioned above in the Practice Problems section.
2. **Intermission**: 5 minute break
3. **Challenge Phase**: You are able to challenge other competitor’s code with a test case that you think might result in a failed output. You will receive 50 bonus points if your challenge succeeded and the person you challenged will lose their points for that problem. If you were unsuccessful, you will lose 25 points. Remember you can only challenge members who are in your room(at the beginning of the match you are assigned to a room).
    a. To Challenge click on the “Summary” button right next to the Select One drop down.

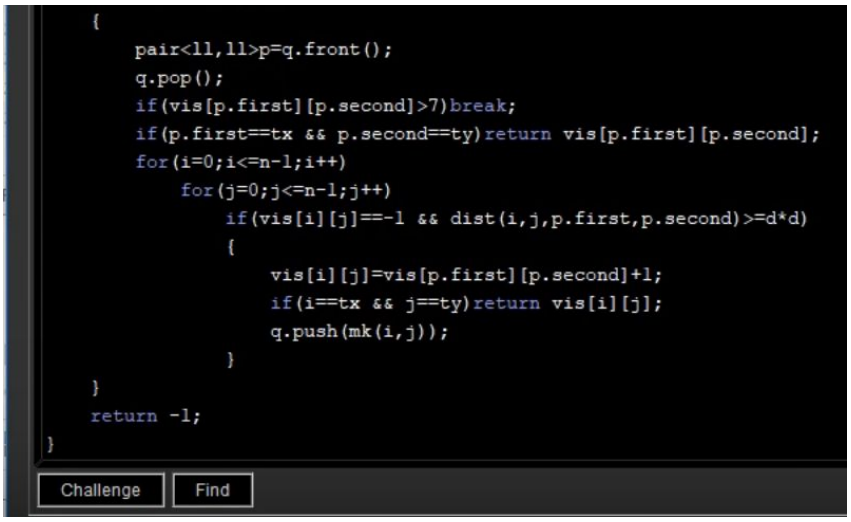


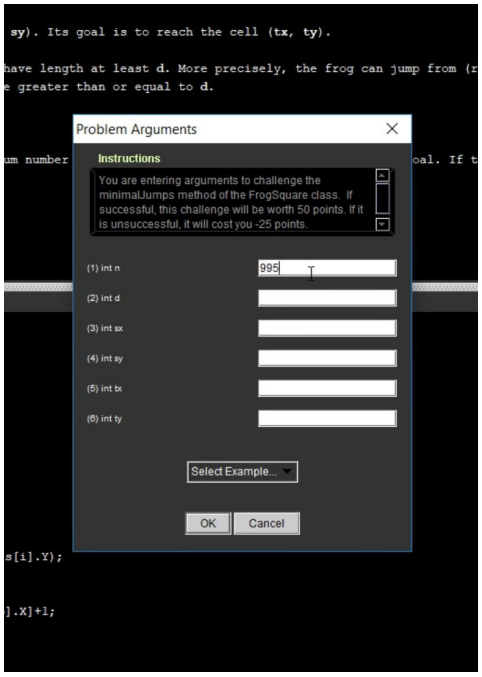
b. In the Room Summary Window you can click on the competitor's score in the particular problem to open his code.

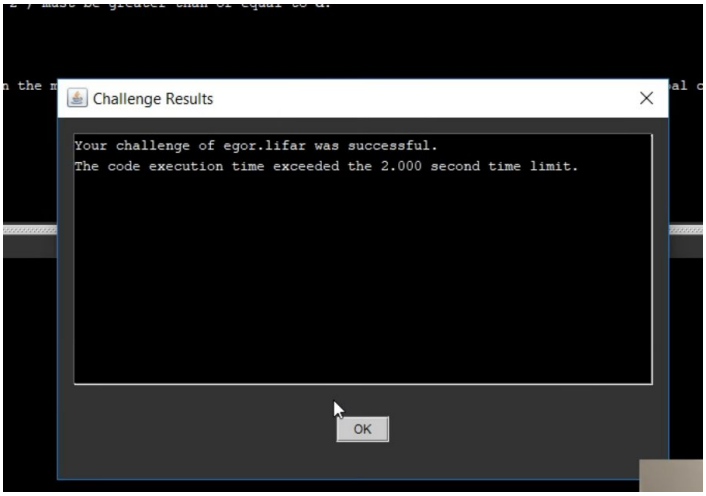


c. Once you click on the problem - the competitors code will open and you can see a “Challenge Button” on the bottom right. Click on that if you feel the code will fail on some test case or time limit mentioned will exceed for that particular test case.

d. Enter the test case inputs, on which you think the code will fail. You will see a window informing you if the challenge was successful or unsuccessful.







4. **System Testing Phase**: The Topcoder System will execute extra test cases on all of the submissions

   After the system tests finishes go to Active Contests > SRM XXX > Division Summary to see the final results