Start using TopCoder Arena (Practice Problems and SRMs) + KawigiEdit Plugin

In this quick guide i'll try to explain the following :

1. Setting up the Arena
2. Setting up KawigiEdit Plugin (Very Useful)
3. Practice Problems in previous SRMs
4. Joining Active SRMs

Setting up the Arena :

- First you have to have JRE (Java Runtime Environment).
- you can Download the latest version from here
- http://java.com/en/download/index.jsp
- Download the TopCoder Arena from here
- http://www.topcoder.com/contest/arena/ContestAppletProd.jnlp
- It's preferred that you move the downloaded file to a folder of its own.
- lets call it "TopCoder Arena".
- Click on the file to Launch The Arena.
- Enter your TopCoder Handle (username) and Password.

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- You should see the following Screen if you logged in correctly

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- We'll get back to how to use the arena.

Setting up KawigiEdit Plugin

This Plugin is very usefull and saves a lot of time during contests (SRMs) (Time = Score)

We'll only discuss some of its features and how to Set it up

- First you have to download it from here
- http://topcoder.yajags.com/KawigiEdit_2.1.jar
- It's preferred that you put the file in the same directory of the Arena (in the "TopCoder Arena" Folder)
- Start the TopCoder Arena applet (if it's not already running).
- From the Options menu, choose "Editor".The Editor Preferences dialog should come up.
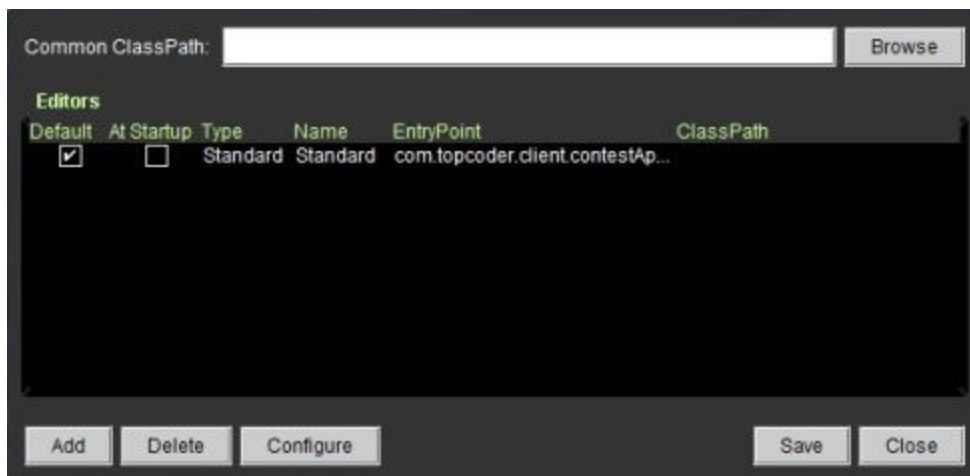
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- Click on the "Add" button. A dialog titled "Enter Plugin Information" should pop up.
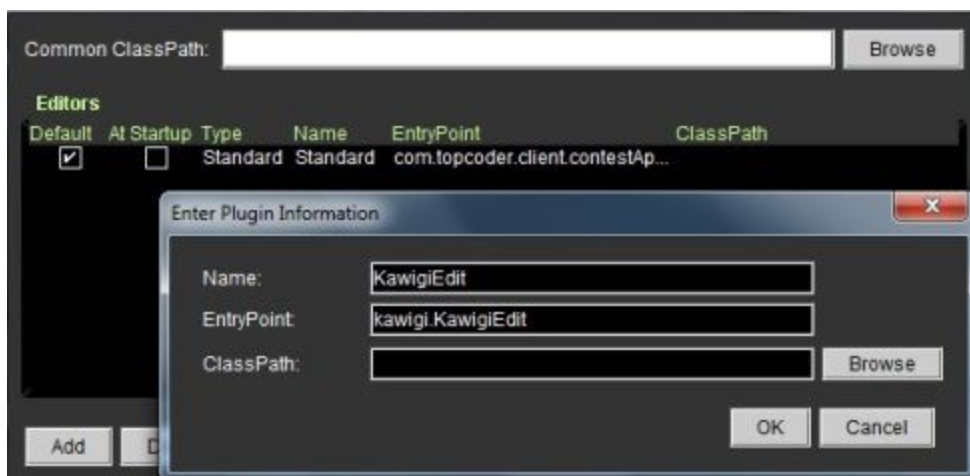
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- Fill In The Fields With the following
- Name : "KawigiEdit"
- EntryPoint : "kawigi.KawigiEdit"

- Click On Browse and Navigate to "TopCoder Arena" Folder and Select The KawigiEdit_x.jar file
- Click Ok and return to the Editor Preferences Dialog.
- Check On the Default Box of the KawigiEdit instead of the Default .
- Click Save and Close.
- Congratulations , you have your KawigiEdit.

Practice Problems in previous SRMs :

Ok , now we'll see how can we practice (submit) problems in TopCoder

- Open the Arena , from the top menu choose practice problems then choose SRMs
- For example we'll open the SRM 575 Div2
- Here is what you should see

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- Every Room has 3 problems (250 – 500 – 1000)
- sorted by their difficulty.
- To Open a problem , from the select menu click on the 250 problem for example.

- The Problem will open in a new window
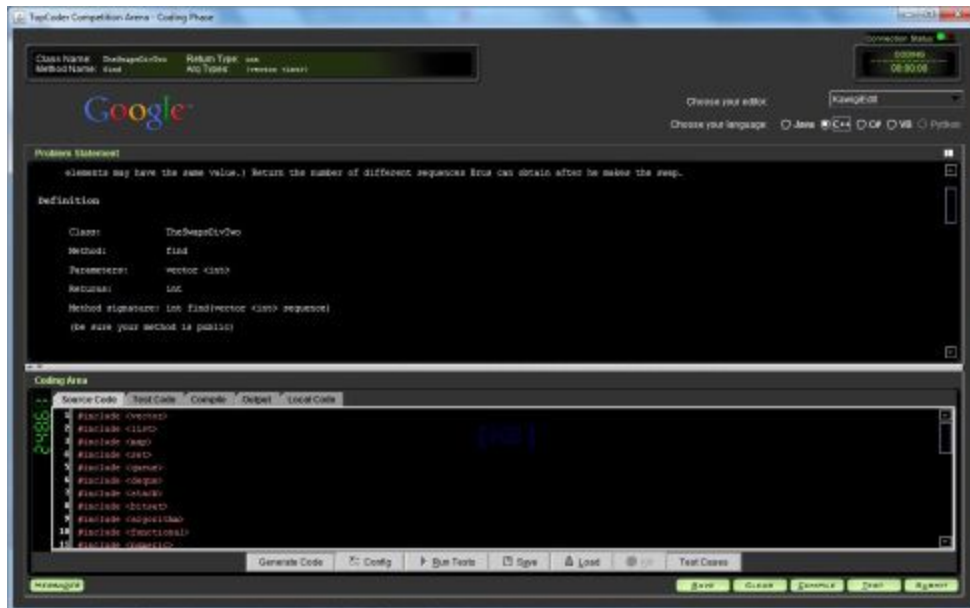
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- The problem statement, is composed of
- Problem Statement
- Definition (KawigiEdit handles most of it)
- Constraints : the limits of the input && || other specifications of the input
- Examples
- Ok, now lets get to Code, TopCoder doesn't depend on standard IO as (uva-spoj-codeforces), it depends on a function inside a class, this function takes the parameters as the input, and returns the output
- Luckily, KawigiEdit does most of this for us, choose on your prefered language from above (c++ in our case), and get back to the code area down.
- You'll find that KawigiEdit made most of the code for you ,all needed #include , the class , the function in it .
- all you have to do is to solve the problem inside the function and return the result at last.
- If you are done with your solution and want to test it, there are 2 ways, one that involves using g++ , and the other one using Visual Studio or any c++ IDE .
- We'll be using the second one
- Open VS and create an empty c++ project and make a cpp source file
- Copy The source Code from the KawigiEdit to VS.
- Back to the KawigiEdit open the Test Code tab.
- Copy the code in it and add it to the code in VS.
- Run The program ,and this is how it should look like
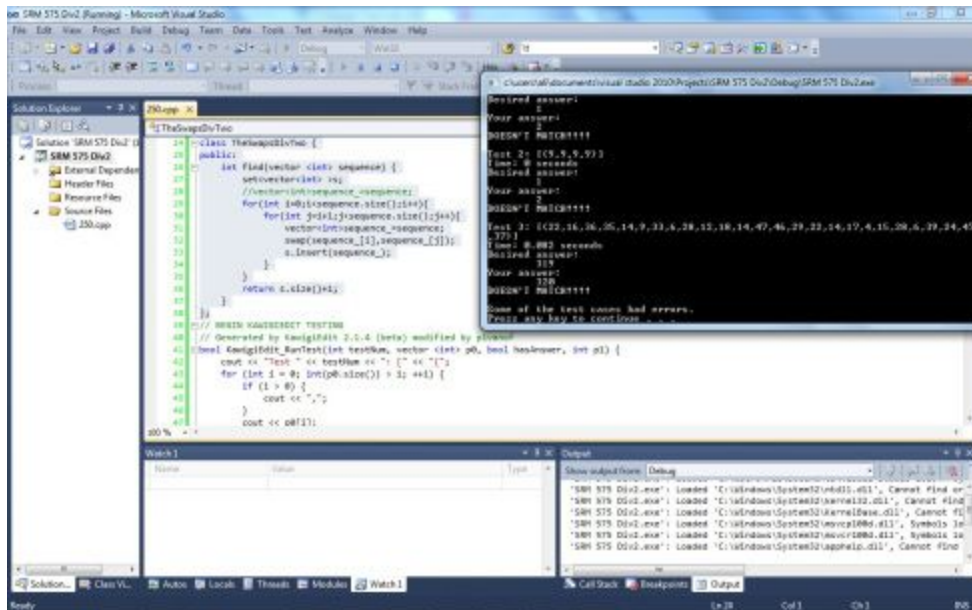
- it will run the tests for you and will tell you if you have any problem with any sample test cast.
- The highlighted code,is the code you are going to submit + the includes above.
- Back to the problem window ,to submit your code click submit and you are done
- you may want to compile your code first to make sure you don't have any errors.

Joining Active SRMs :

in the previous example we discussed how to practice old problems, but here we'll discuss how to join an Active SRM.

SRMs are scheduled in TopCoder, you can join anyone but you have to register in it before it starts

- From the top menu choose Active Contests.
- Select the SRM you want to join
- Click On Register

when the SRM begins Enter it

- From the top menu choose Active Contests.
- Select the SRM you want to join

- Click On Enter

The SRM consists of 4 Phases

1. Coding Phase : In this phase you'll be solving the problems just as mentioned above in the practice
2. Intermission : 5 minutes to take your breath
3. Challenge Phase: You can challenge others code with a test case that you think his code would fail, you get score if the challenge succeeded else you lose score
4. System Testing Phase : TopCoder System will run extra test cases on all participants' code
5. after the system tests finishes go to Tools > Room Summary to see if your code passed