

How to Use the System

Read First: When Getting in Trouble with the System

Do not panic; stay calm. Raise your hand to call a staff member and tell them about your trouble. Here are a couple of phrases that may be useful in typical situations:

- “We printed _____ (source code, debug output, ...) about ____ minutes ago but have not received the printout.”
- “_____ (browser, Eclipse, ...) does not start.”
- “_____ (computer, keyboard, mouse, ...) stopped working.”

Staff will call the system team for you when they cannot help you by themselves.

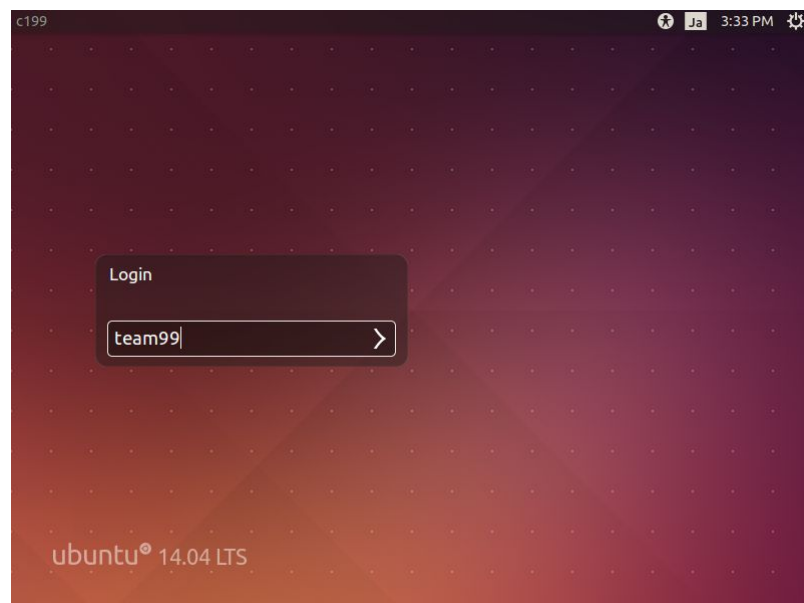
Do not use the Clarification for system troubles. You will be responded with “Contact the staff.”

Logging In to Your Computer

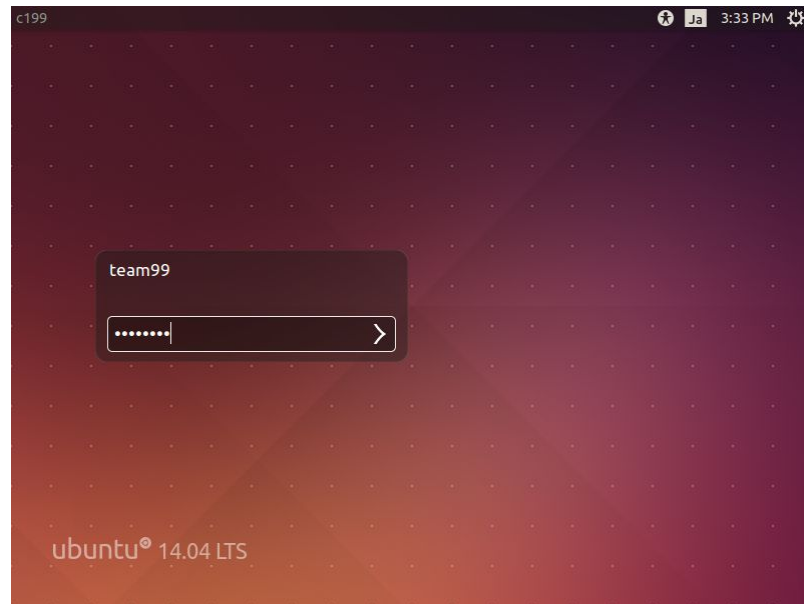
Your team ID and password are provided in another document.

Note: You will use *the same team ID* but *different passwords* in the trial use (Saturday) and the main contest (Sunday). You will receive a document of login information each day.

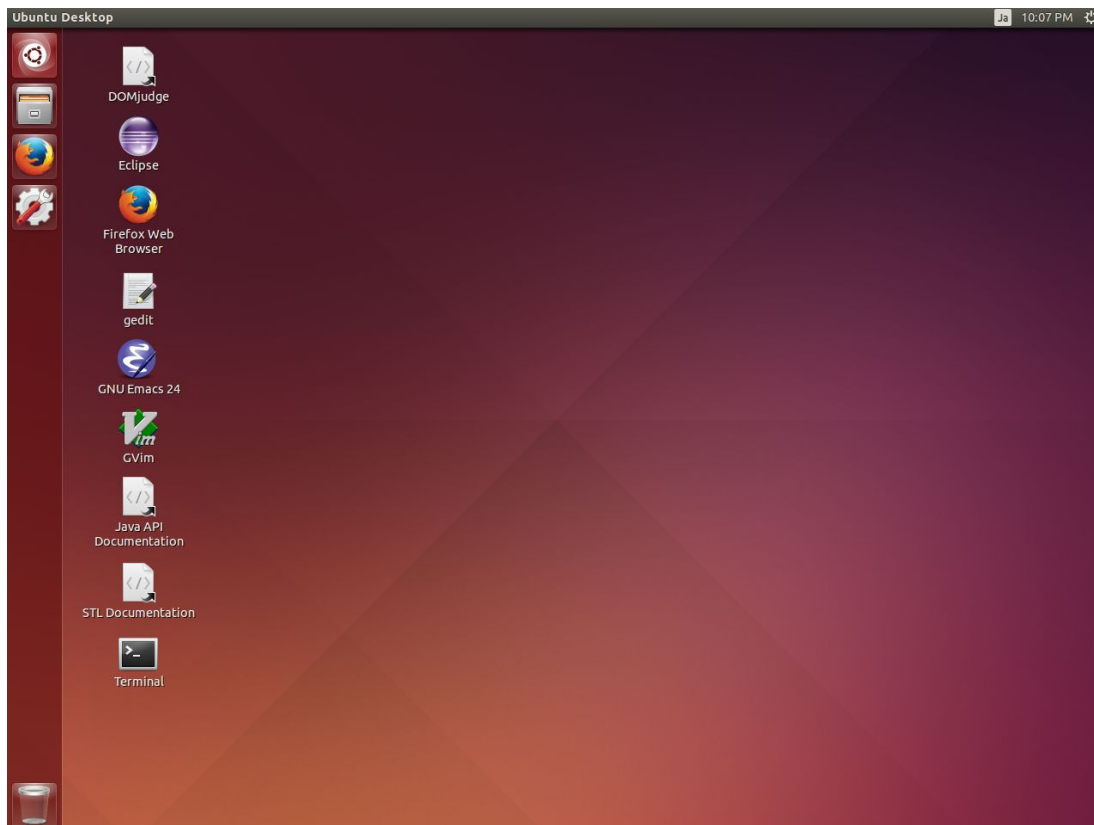
1. Type your team ID (team1 or team2 or ...) and press [Enter]:



2. Type your password and press [Enter]:



You should see a screen like this:



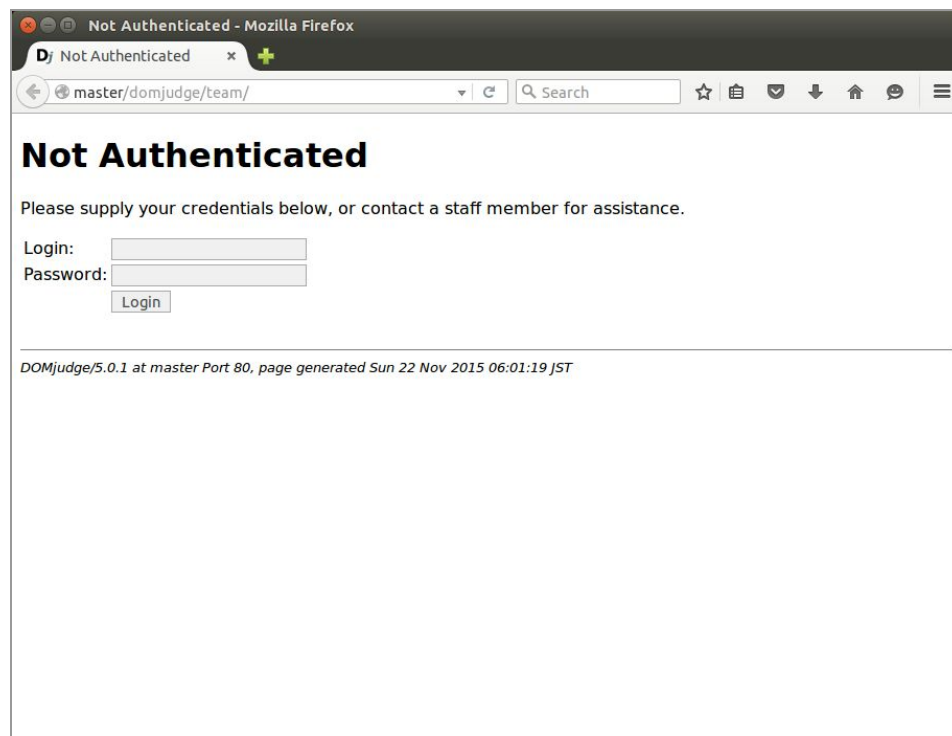
Logging In to the Contest System

We use *DOMjudge 5.0.1* for the contest system this year.

1. Double-click the DOMjudge shortcut on the desktop. It will open a new tab of Firefox.



2. Type your team ID and password (the same ones as you used to log in to the computer), then click the [Login] button.

A screenshot of a web browser window showing the login page for DOMjudge. The browser title is "Not Authenticated - Mozilla Firefox". The address bar shows "master/domjudge/team/". The page content includes the heading "Not Authenticated", a message "Please supply your credentials below, or contact a staff member for assistance.", and a login form with fields for "Login:" and "Password:", and a "Login" button. At the bottom, there is a footer line: "DOMjudge/5.0.1 at master Port 80, page generated Sun 22 Nov 2015 06:01:19 JST".

Not Authenticated

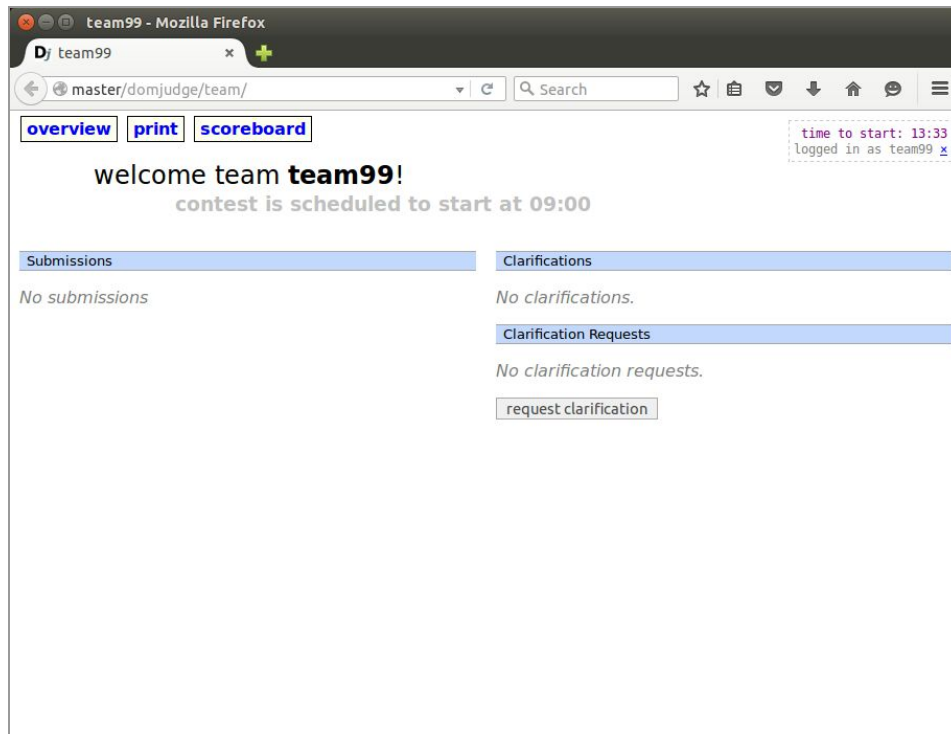
Please supply your credentials below, or contact a staff member for assistance.

Login:

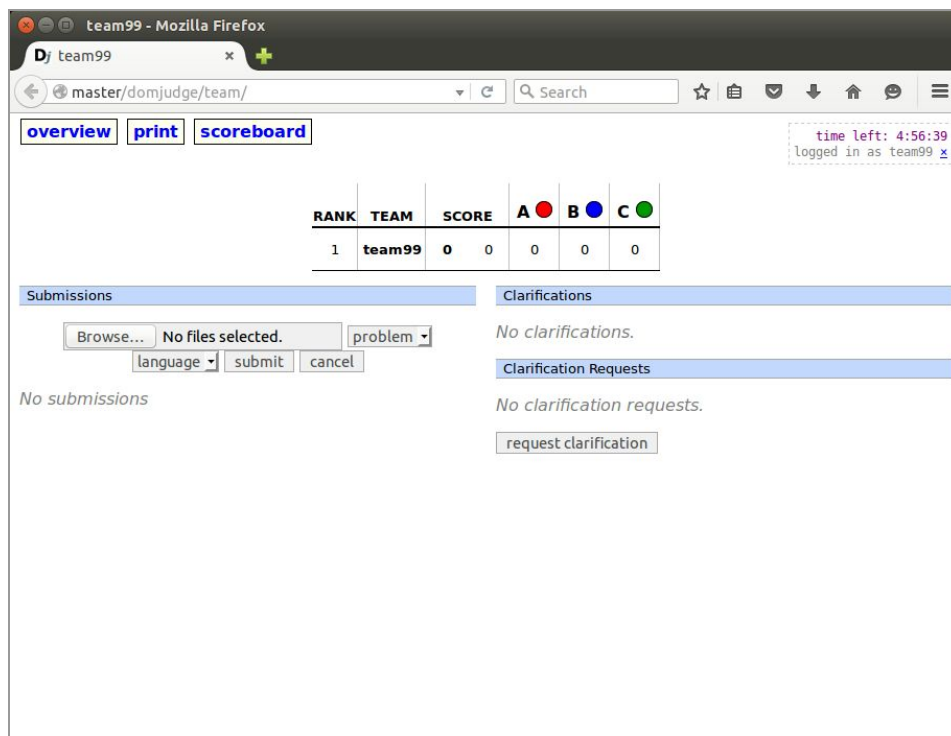
Password:

DOMjudge/5.0.1 at master Port 80, page generated Sun 22 Nov 2015 06:01:19 JST

You should see a page like this:



Once the contest starts, you will see a page like this:



Submitting Your Code

The screenshot shows a web browser window with the URL `master/domjudge/team/`. The page has three tabs: `overview`, `print`, and `scoreboard`. A timer in the top right corner shows `time left: 4:30:23` and `logged in as team99`.

RANK	TEAM	SCORE	A	B	C
1	team99	1 15	1/15	0	0

The `Submissions` section is highlighted with a red dashed box. It contains a file selection area with a `Browse...` button, a text field showing `No files selected.`, a `problem` dropdown menu, a `language` dropdown menu, and `submit` and `cancel` buttons.

The `Clarifications` section shows `No clarifications.`

The `Clarification Requests` section shows `No clarification requests.` and a `request clarification` button.

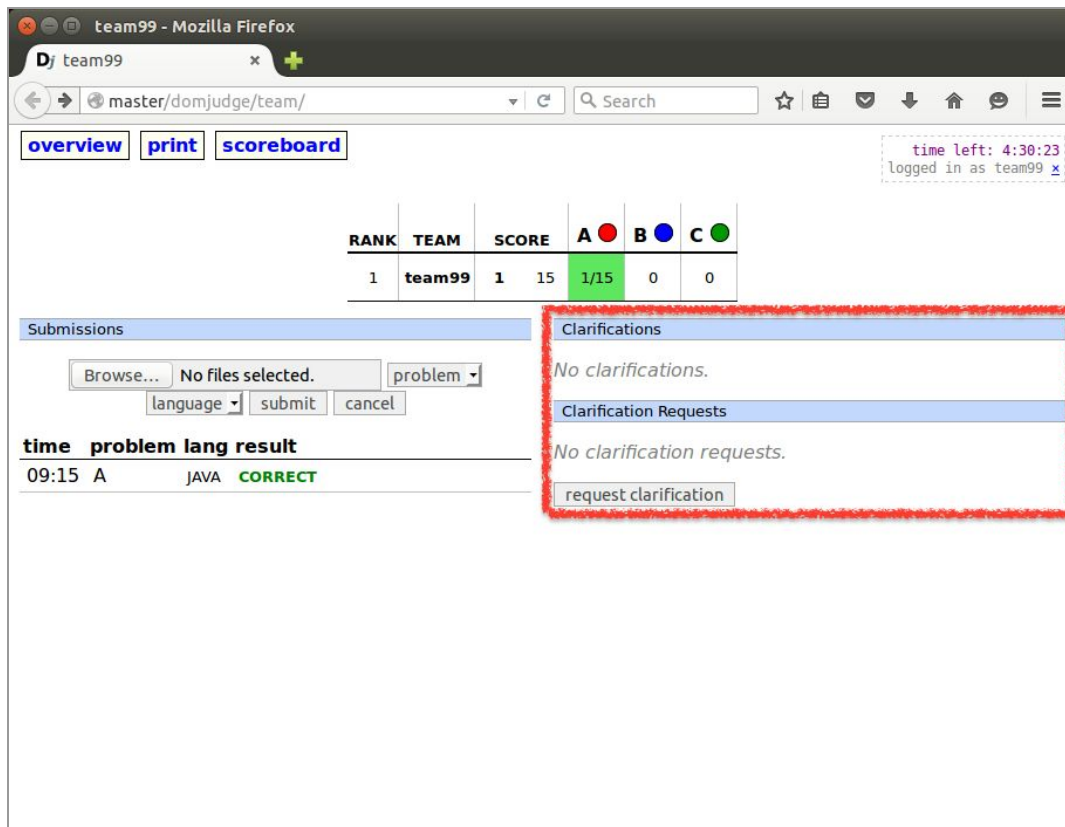
time	problem	lang	result
09:15	A	JAVA	CORRECT

You can submit your code on the left side of the page. Select the file, the problem, and the language, then click the [submit] button. If you are using Eclipse, your source files are typically found under the folder named `workspace`.

Filenames may contain only alphabets (A...Z, a...z), digits (0...9), and some symbols (+, ., _), and must start with an alphabet or a digit (may not start with a symbol).

The results of your submissions are shown below the submission form. You can click on each row to see the details of a submission.

Communicating with the Judge



The screenshot shows a web browser window with the URL `master/domjudge/team/`. The page has three tabs: `overview`, `print`, and `scoreboard`. In the top right corner, it displays `time left: 4:30:23` and `logged in as team99`. The scoreboard table is as follows:

RANK	TEAM	SCORE	A	B	C
1	team99	1 15	1/15	0	0

Below the scoreboard, there are two main sections: `Submissions` and `Clarifications`. The `Submissions` section includes a file upload area with `Browse...`, `No files selected.`, and `problem` dropdown, along with `language` dropdown, `submit`, and `cancel` buttons. Below this is a table with columns `time`, `problem`, `lang`, and `result`. The first row shows `09:15`, `A`, `JAVA`, and `CORRECT`. The `Clarifications` section is highlighted with a red dashed border and contains `No clarifications.`, `Clarification Requests`, `No clarification requests.`, and a `request clarification` button.

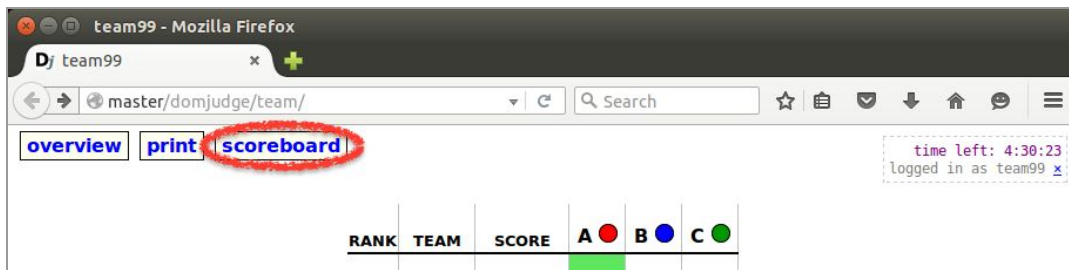
The right side of the page has two sections: Clarifications and Clarification Requests.

Clarifications shows messages from the judge. When the judge makes announcements to all teams, they will show up in this section.

Clarification Requests allows you to ask questions to the judge *about problems*. To ask a question, click the [request clarification] button. It will show a form; fill it and click the [Send] button. Be sure to write your question *in English!* When you receive an answer, it will show up in Clarifications.

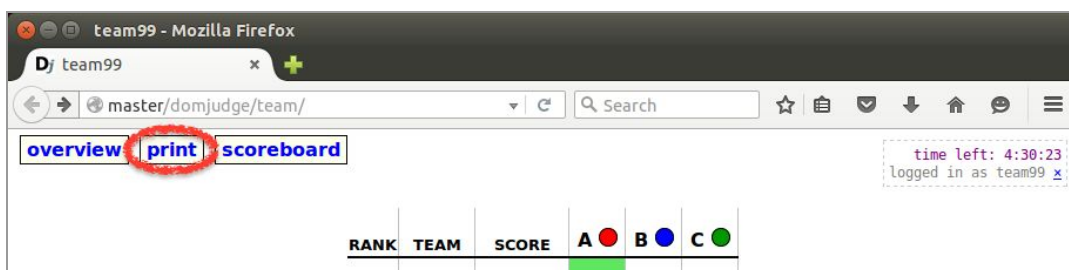
Do not ask questions *about the system* with this feature — see the very beginning of this document.

Viewing the Scoreboard



Click [scoreboard] in the top navigation links to see the current standings. Note the scoreboard will stop getting updates at 30 minutes before the contest ends.

Printing Your Code and Text



Click [print] in the top navigation links, then select the file and the [Print code] button.

Your printouts will be delivered to your seat by staff. **Do not** attempt to pick them up by yourself; the printers are located in the staff area, which you cannot enter.

Do not use other methods, especially printing features in applications.

Only plain text is supported. **Do not** print anything else (e.g. PDF, HTML).

We do not have many printers. **Do not** print many pages of documents. Printing the whole content of STL document or Java API document is a bad idea, for example.

Writing and Compiling Your Code

The system has Eclipse, gedit, Emacs, and Vim/GVim for IDEs and editors. Use your favorite. There is a shortcut on the desktop for each of them.

See [Appendix A](#) for the compiler options used on the judge system.

If you are using editors other than Eclipse and need instructions about how you can compile and run your programs, please see [Appendix B](#).

Customizing the System

We strongly discourage you from changing system settings. If you choose to do, you are responsible for all troubles it could cause, i.e. you must do it at your own risk.

Also be advised the system will be reset to the original state between the trial use and the main contest. All files and customizations made during the trial use will be lost.

Taking Out Your Files after the Contest

If you would like to take your files out of the computer after the contest, please put them in:

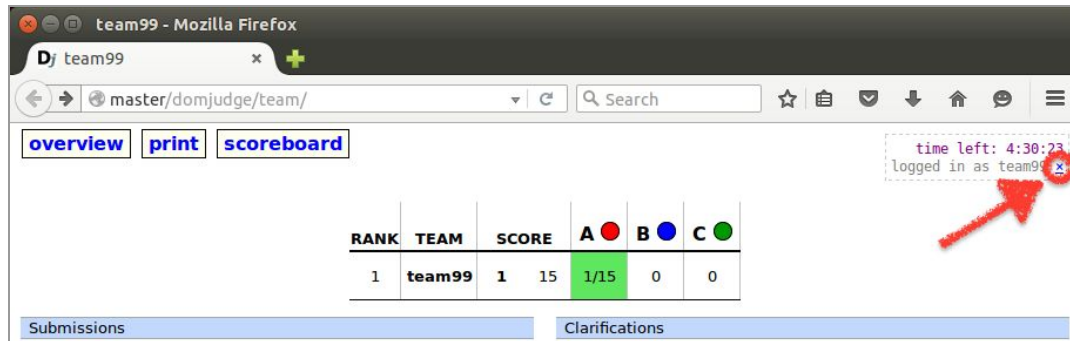
`~/takeout`

We will pick up the files there and send them to you by email. We will give you some time to copy the files after the contest is over, so that you do not have to care about it during the contest.

See [Appendix C](#) if you need step-by-step instructions.

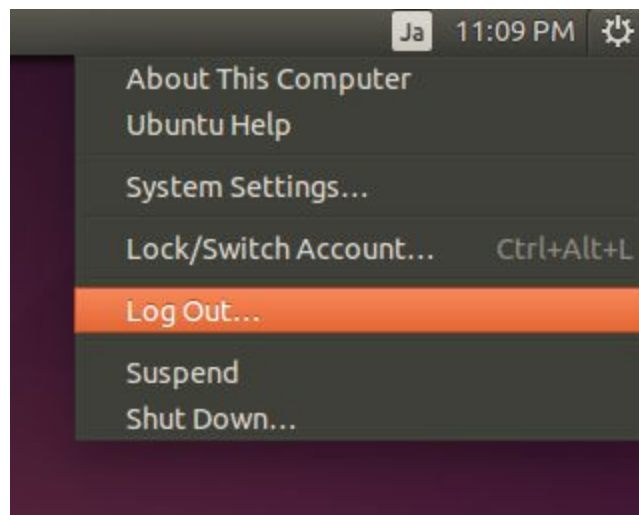
Logging Out from the Contest System

1. Close the browser, or click [x] in the box at the top-right corner.



Logging Out from Your Computer

1. Click the gear icon at the top-right corner of the screen.
2. Select [Log Out...] from the popup menu. **Do not** shut down or suspend the computer.



Appendix A: How Your Code is Evaluated

The judge system will compile your source file(s) with the following options:

C: `gcc -g -O2 -std=gnu99 -static yourfile.c -lm`

C++: `g++ -g -O2 -std=gnu++0x -static yourfile.cc`

Java: `javac -encoding UTF-8 -sourcepath . -d . yourfile.java`

and run the binary with the following commands:

C/C++: `./a.out < infile > outfile`

Java: `java -client -Xss8m -Xmx2048m -Xms1024m MainClass1 < infile > outfile`

Also there are a few restrictions on the judge system:

- The total amount of source code must not exceed 256 KB in each submission.
- Your program must compile within 30 seconds.
- Your program will run in a sandboxed environment with 3 GB of memory. Note this is the total amount of memory, not the amount you can use in your program.

See the DOMjudge team manual for full details about these restrictions.

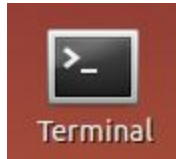
¹ DOMjudge will detect the main class automatically; you should not have to name it `Main`. See the DOMjudge team manual for details.

Appendix B: How to Compile and Run Your Code

C/C++

We assume that you save your source file as `ProbA.c` or `ProbA.cpp` and input file as `ProbA.in` in your home folder (`teamXX`). Do not create them on the desktop; it is not the way we expect.

1. Double-click the Terminal shortcut on the desktop.



2. Type as follows in the Terminal window (↵ denotes [Enter]), depending on whether you are using C or C++. It compiles your code and generates a binary as `a.out`.

C: `gcc -g -O2 -std=gnu99 -static ProbA.c -lm↵`

C++: `g++ -g -O2 -std=gnu++0x -static ProbA.cpp↵`

3. Type as follows to run your program:

`./a.out < ProbA.in↵`

If you would like to save the output into a file:

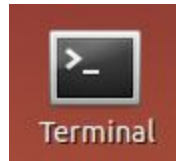
`./a.out < ProbA.in > ProbA.out↵`

```
team99@c199: ~
team99@c199:~$ g++ -g -O2 -std=gnu++0x -static ProbA.cpp
team99@c199:~$ ./a.out < ProbA.in
Hello world!
Hello Jan!
Hello SantaClaus!
team99@c199:~$
```

Java

We assume that you save your source file as `ProbA.java` and input file as `ProbA.in` in your home folder (`teamXX`). Do not create them on the desktop; it is not the way we expect.

1. Double-click the Terminal shortcut on the desktop.



2. Type as follows in the Terminal window (`↵` denotes [Enter]). It compiles your code into Java class files (`Main.class` and maybe others in this case).

```
javac -encoding UTF-8 -sourcepath . -d . ProbA.java↵
```

3. Type as follows to run your program:

```
java -client -Xss8m -Xmx2048m -Xms1024m ProbA < ProbA.in↵
```

If you would like to save the output into a file:

```
java -client -Xss8m -Xmx2048m -Xms1024m ProbA < ProbA.in > ProbA.out↵
```

A screenshot of a terminal window with a dark purple background. The window title is 'team99@c199: ~'. The terminal shows the following commands and output:

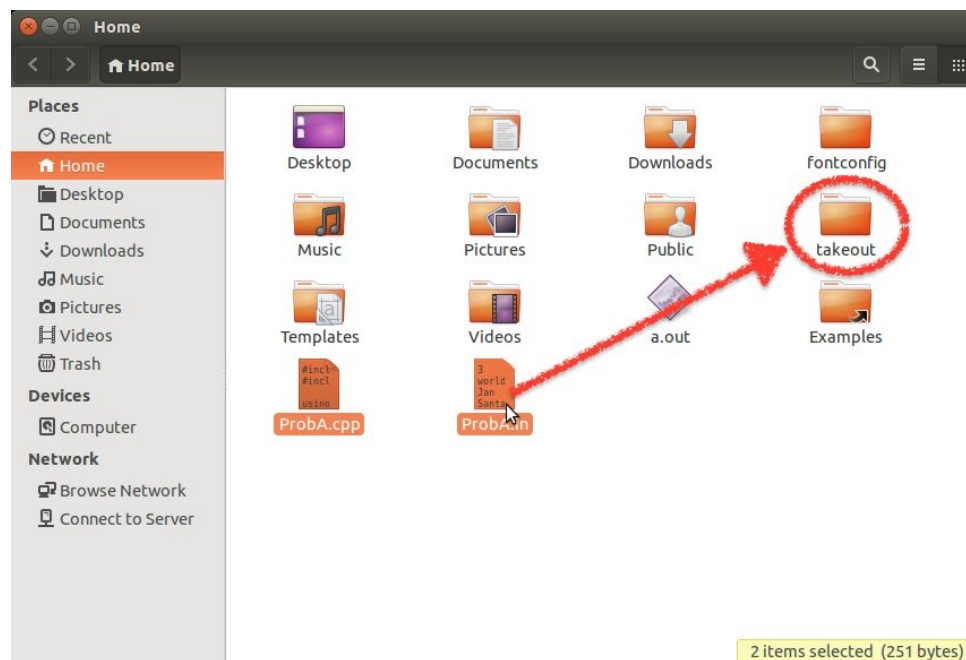
```
team99@c199:~$ javac -encoding UTF-8 -sourcepath . -d . ProbA.java
team99@c199:~$ java -client -Xss8m -Xmx2048m -Xms1024m ProbA < ProbA.in
Hello world!
Hello Jan!
Hello SantaClaus!
team99@c199:~$ █
```

Appendix C: How to Move Your Files to Take Out

1. Click [Files] in the launcher (on the left of the screen) to open your home folder.



2. Select your files to copy. You can use [Shift] and [Ctrl] as you do in Windows/Mac.²
3. Drag and drop them into the takeout folder.



² For Mac users: [Ctrl] behaves like [command] here.