

UIL Computer Science Programming Contest Installation of the Judging Environment

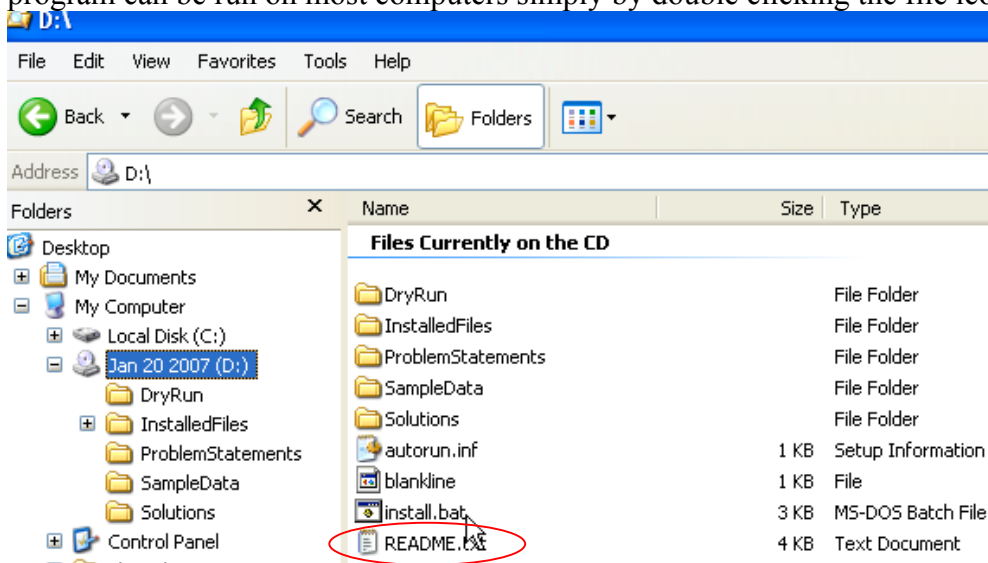
Introduction: These instructions are for the installation of the judging environment for the UIL Computer Science programming contest. You are not required to use the provided judging environment. It is provided as one option for contest directors to choose from, and can be a good solution for directors and schools that are new to judging a computer programming contest.

Please note, computers and computer systems vary widely. Depending on your school's computer systems and installed security measures, you may have to perform slightly different steps. **It is strongly suggested that the judging environment be installed and tested prior to the day of the contest in case you encounter difficulties. You may encounter difficulties installing and running bat files depending on the security measures in place on the computer you are using.** Please consult your campus computer / information technology expert if you encounter difficulties.

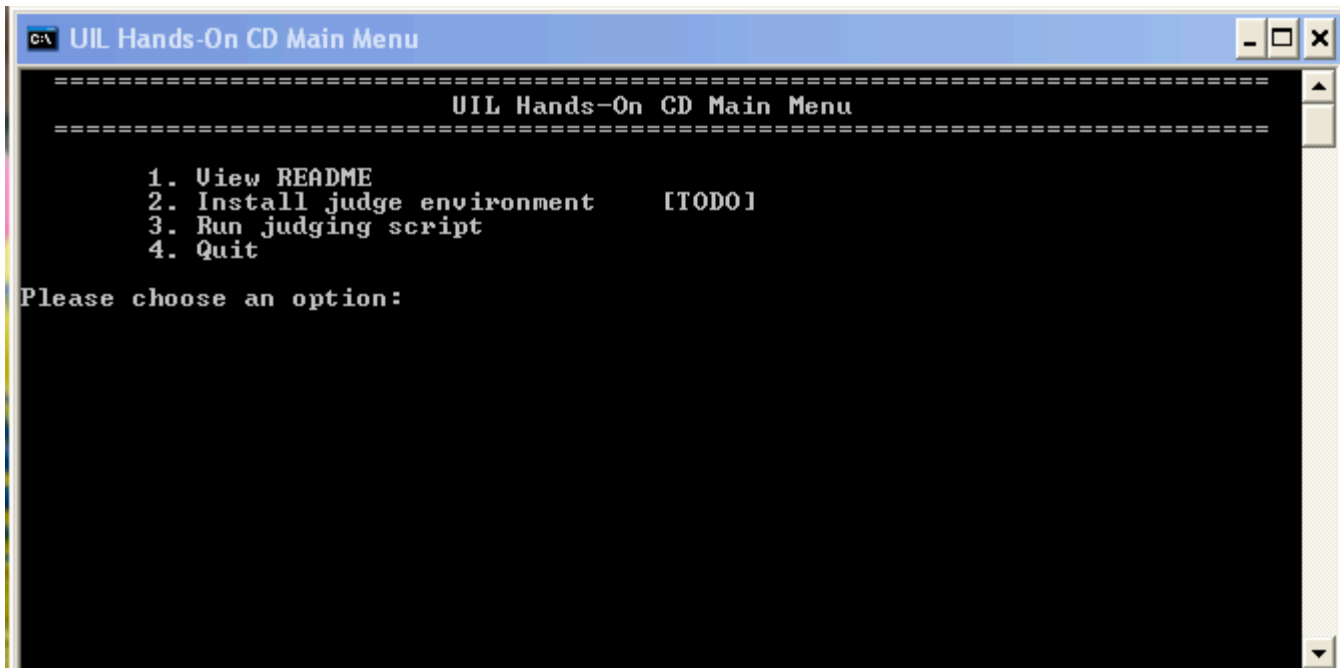
Number of Judging Stations: You should install the judging environment on each computer that will be used for judging. It is not installed on contestants' computers. You should have 1 judging computer for every 3 teams in the programming contest. For 8 teams, 2 to 3 judging stations should be sufficient.

Installation Steps:

1. Place the provided CD into the computer.
2. To install the judging environment, open the CD and run the `install.bat` program. This program can be run on most computers simply by double clicking the file icon.



3. When the installation program is running you will see the following screen:



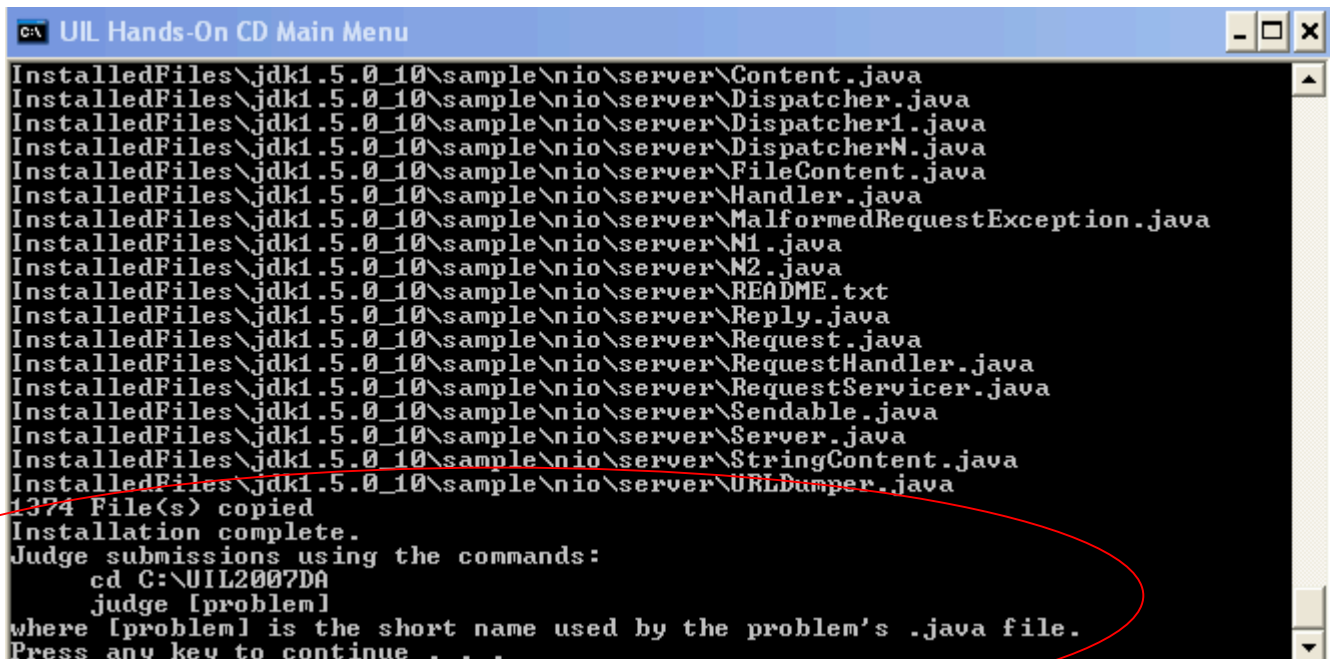
A screenshot of a Windows command prompt window titled "UIL Hands-On CD Main Menu". The window has a blue title bar with standard Windows window controls. The background is black with white text. The text is as follows:

```
=====
                        UIL Hands-On CD Main Menu
=====

    1. View README
    2. Install judge environment    [TODO]
    3. Run judging script
    4. Quit

Please choose an option:
```

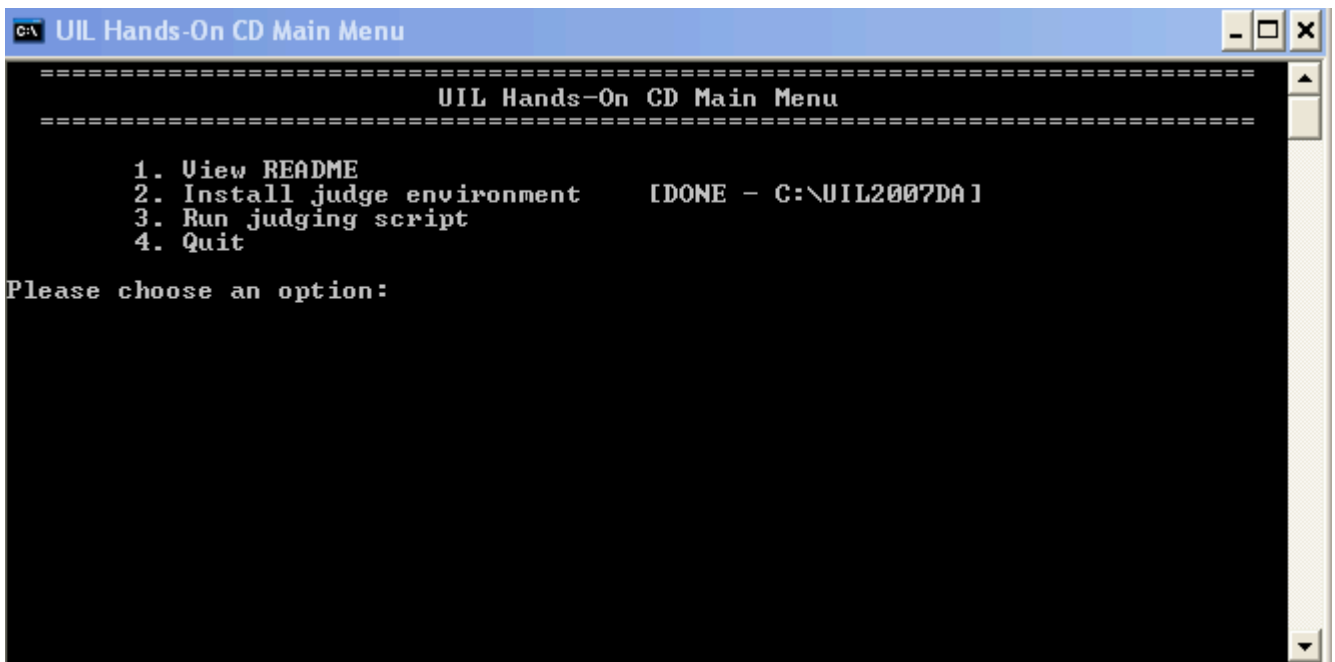
4. To install the judging environment simply select option 2, "Install judge environment." This will cause a large number of files to be copied from the CD to a folder on your computer's hard drive. This may take up to several minutes.
5. When the files are done being copied you should see the following message:



A screenshot of the same "UIL Hands-On CD Main Menu" window, now showing a list of files being installed. A red oval is drawn around the bottom portion of the text, highlighting the completion message and the commands to run.

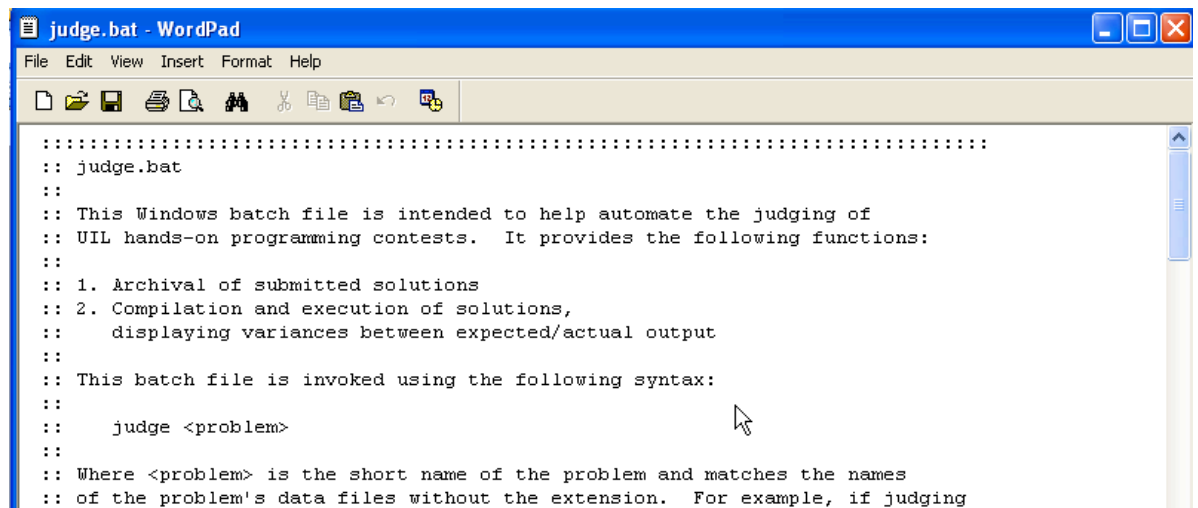
```
InstalledFiles\jdk1.5.0_10\sample\nio\server\Content.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\Dispatcher.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\Dispatcher1.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\DispatcherN.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\FileContent.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\Handler.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\MalformedRequestException.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\N1.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\N2.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\README.txt
InstalledFiles\jdk1.5.0_10\sample\nio\server\Reply.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\Request.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\RequestHandler.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\RequestServicer.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\Sendable.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\Server.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\StringContent.java
InstalledFiles\jdk1.5.0_10\sample\nio\server\URLDumper.java
1374 File(s) copied
Installation complete.
Judge submissions using the commands:
    cd C:\UIL2007DA
    judge [problem]
where [problem] is the short name used by the problem's .java file.
Press any key to continue . . .
```

6. Press any key to continue. This will take you back to the UIL Hands-On (programming) CD Main Menu.



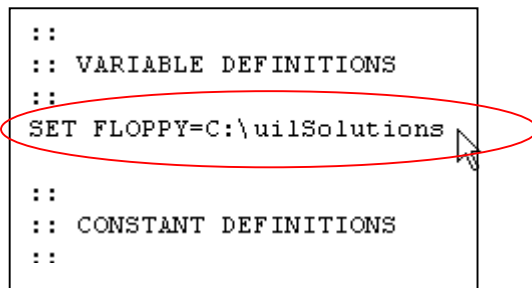
The folder the judging environment has been installed into will be displayed next to option 2. It should be `C:\UILProgramming` (**note that this directory name replaces the `UIL2007DA` directory name indicated in some of the screen captures**).

7. You can now quit the UIL Hands-On CD Main Menu.
8. The `judge.bat` program that has just been installed may need to be altered depending on what system you plan to use for judging. Sites using the judging environment will typically have teams submit solutions on USB flash drives. You may either alter `judge.bat` to read from those drives, but a better solution is to copy solutions from those drives to a folder on your computer and judge them from there. In the example I assume contestants' solutions will be copied into a folder on the computer's hard drive named `C:\UILSolutions`. This is also the default value for the `FLOPPY` variable in the `judge.bat` program, so if you use this method you will not need to make changes to `judge.bat`.
 - a. You may use a word processor to make changes to `judge.bat` but you must save the file in plain text format and maintain the `.bat` file extension. In this example I have opened `judge.bat` using the Windows WordPad program. NotePad on Windows is often the easiest program to use.



```
judge.bat
::
:: This Windows batch file is intended to help automate the judging of
:: UIL hands-on programming contests. It provides the following functions:
::
:: 1. Archival of submitted solutions
:: 2. Compilation and execution of solutions,
::    displaying variances between expected/actual output
::
:: This batch file is invoked using the following syntax:
::
::    judge <problem>
::
:: Where <problem> is the short name of the problem and matches the names
:: of the problem's data files without the extension. For example, if judging
```

- b. To change the location the judging programs reads contestants' solutions from find the line in judge.bat that reads "SET FLOPPY= C:\UILSolutions " Change the " C:\UILSolutions " to the new location.



```
::
:: VARIABLE DEFINITIONS
::
SET FLOPPY=C:\uilSolutions
::
:: CONSTANT DEFINITIONS
::
```

- c. Save the altered judge.bat file. You would have to copy contestant solutions into the C:\UILSolutions, or whatever other location you've defined, in order to run the judging program.
9. Repeat these steps for all the computers that will be used as judging stations for the contest. See the instructions for running the judging program.