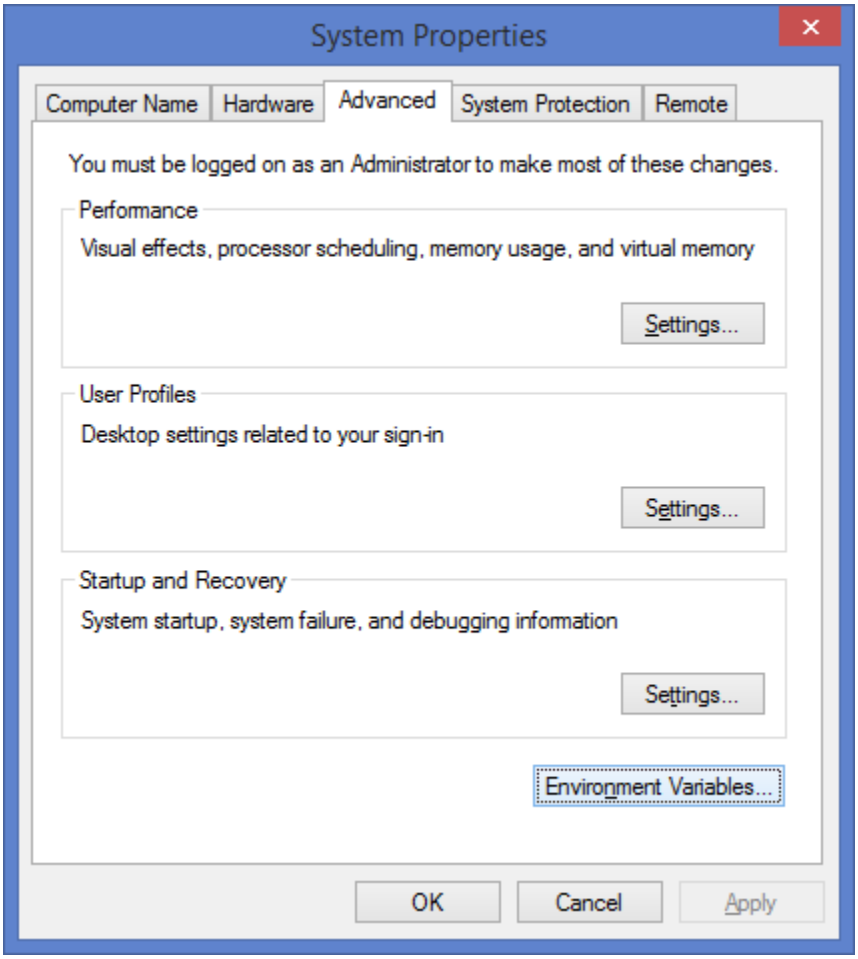
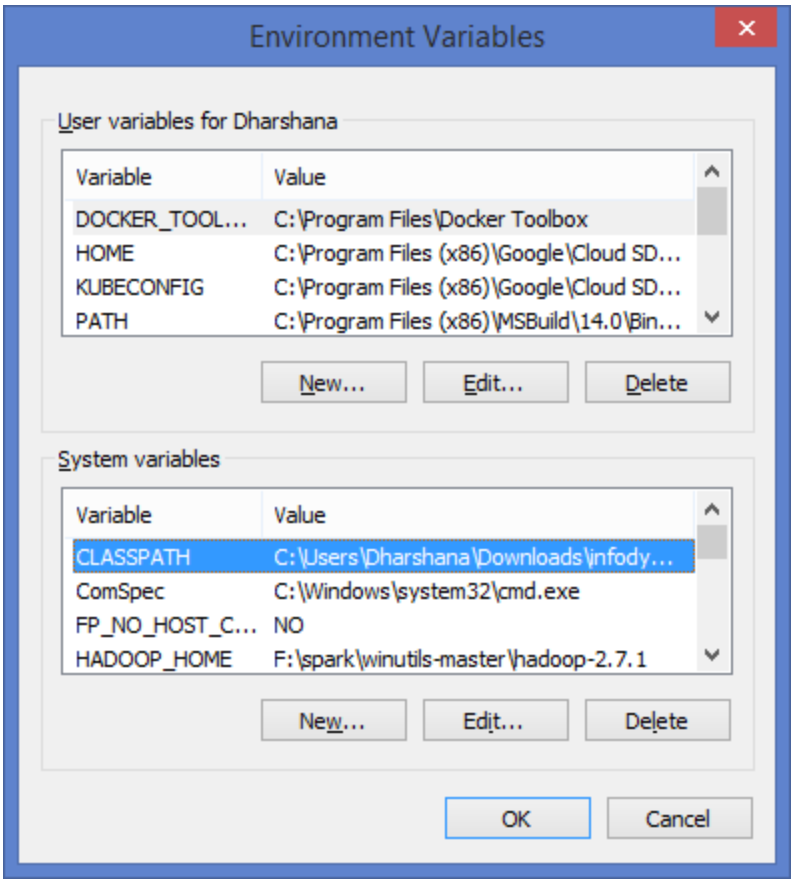
SE3020 – Distributed Computing

Lab 2 – Java RMI

1. Copy/Import the source files to a local directory.

2. Add the currently directory to CLASSPATH. If you have access to the system variables, you can do that by editing the CLASSPATH system variable. If you don't have access, you can do this by using the command line. This is necessary for rmic and rmiregistry to locate the path of the class files later on.





Add the path of the current directory to the end of the current CLASSPATH, followed by a semicolon.

If you don't have access to the system properties directly (such as in the lab pc), you can alternatively edit the classpath environment variable using the command line. Note that if you open a new command prompt, you will have to edit the classpath again in the command prompt.

You can do this by typing the command,

set CLASSPATH=%CLASSPATH%;<<your directory path here>>

3. Compile the source files using 'javac *.java' command.

4. Generate the server stub using the command 'rmic MathServer.java'

5. Start the rmiregistry using the command ‘start rmiregistry’.

6. Run the server with the given security policy file.

   java –Djava.security.poicy=allowall.policy MathServer

7. Run the client with the given security policy file.

   java –Djava.security.poicy=allowall.policy MathClient

8. Add two methods to the Server remote interface to calculate the square root ($\sqrt{x}$) value and the square value (x^2) of a given number that is passed from the client. You may have to re-compile the Server and client source files and re-generate the server stub afterwards.

Submission

Add detailed comments to the newly added code. Compress the resulting project to a zip file and rename the zip file name to your registration ID. Upload the zip file to the provided link on courseweb.