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“RMI Client-Server Query”

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Introduction:

This is a simple Rmi(Java Remote Method Invocation) Client-Server Program that allow the Client to query for the "first name" of a student and to receive the list of "last name" of student with the same name. The Server will query a postgres database to receive the list of student to pass to the Client.

Project setup:

- **Database:**
  1. Import database cpe_545.pgsql by following the link:
  2. Name of database:cpe_545
  3. Localhost:5432

  https://www.interserver.net/tips/kb/export-import-postgresql-database/

- **Server side:**
  1. It is necessary set the database postgresql by changing username and password in Implement,java.

     String DB_URL = **"jdbc:postgresql://localhost:5432/cpe_545"**;

     String USER = **"postgres"**;
     String PASS = **"manideep1116"**;

  2. The Server is set up to work on localhost and local port, then it is not necessary change the IP address in the code.

- **Client side:**

  1. Take note of the Server machine's IP address if operating in two different systems.
  2. Open Implement.java and place the IP address in place of local host.

Server steps

- Change the Directory to the destination folder
- Compile all the java files
- Javac *.java
- Start the registry on the specific port
- start rmiregistry
- Start the Server Program
- java -cp .;postgresql-42.1.4.jar -Djava.security.policy=Client.policy Server

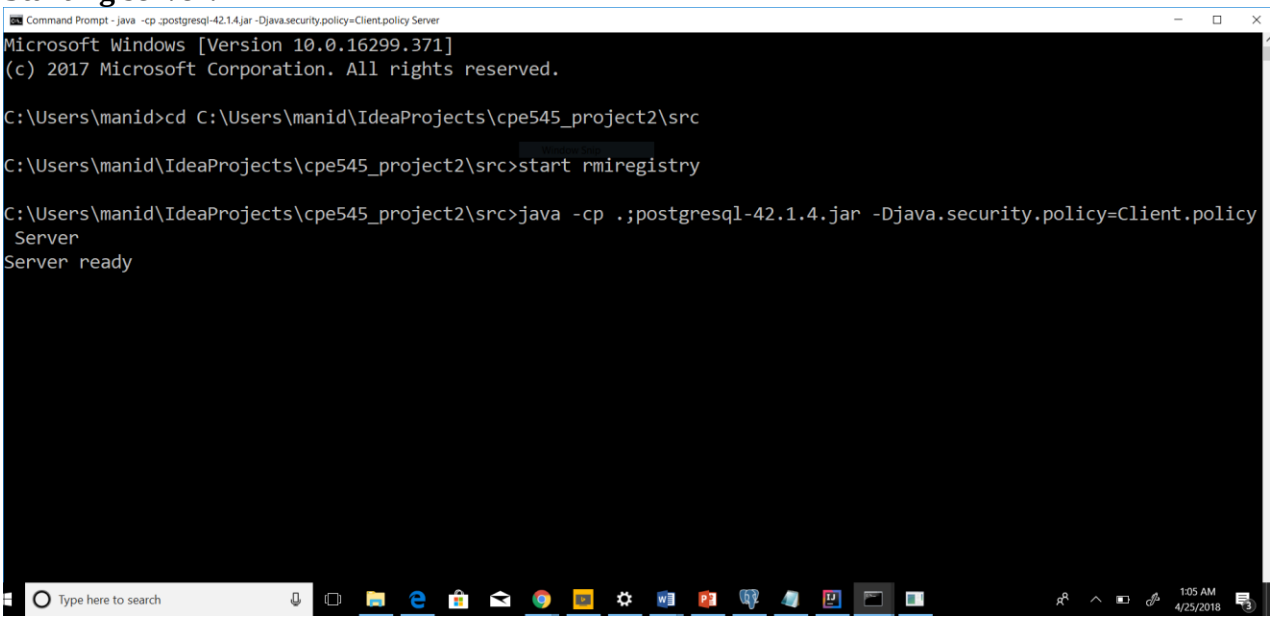
Client Steps

- Change the Directory to the destination folder(…\cpe545_project2\src)
- Compile all the java files
  - Javac *.java
- Start the Client Program
  - Java -Djava.security.policy=Client.policy Client

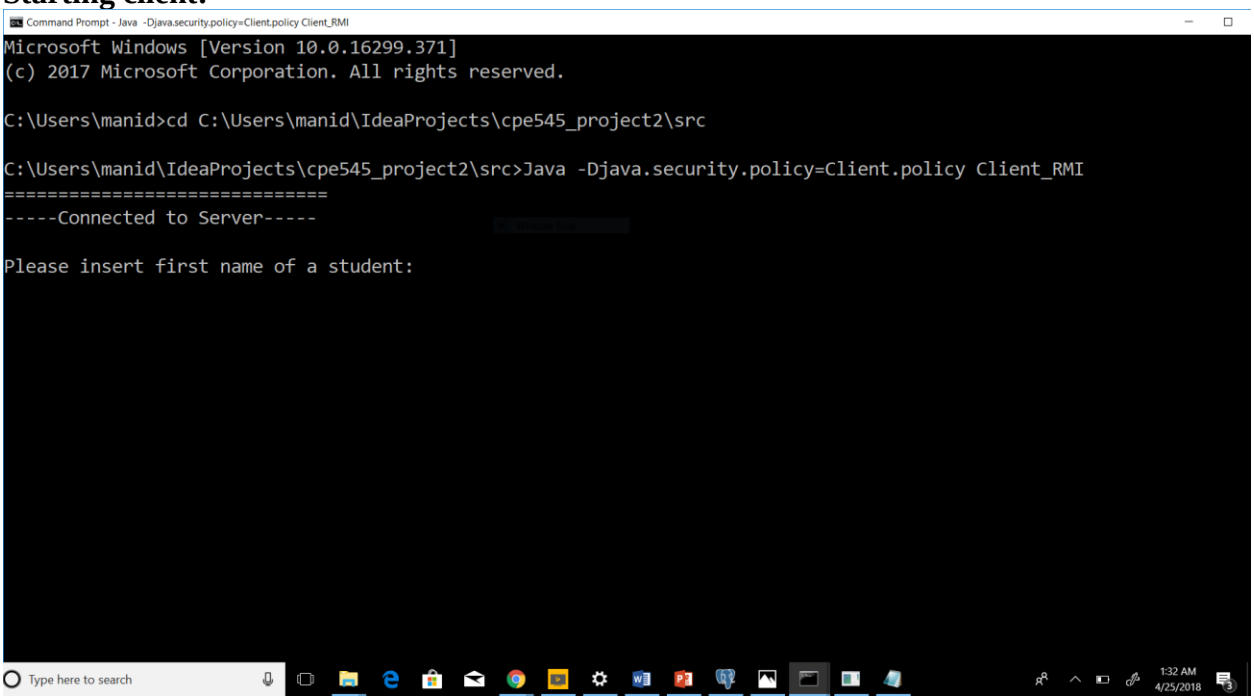
Guide to start simulation:

Open command prompt and follow server steps.
Open another command prompt and follow client steps.
Now the Client and the Server are ready to communicate.

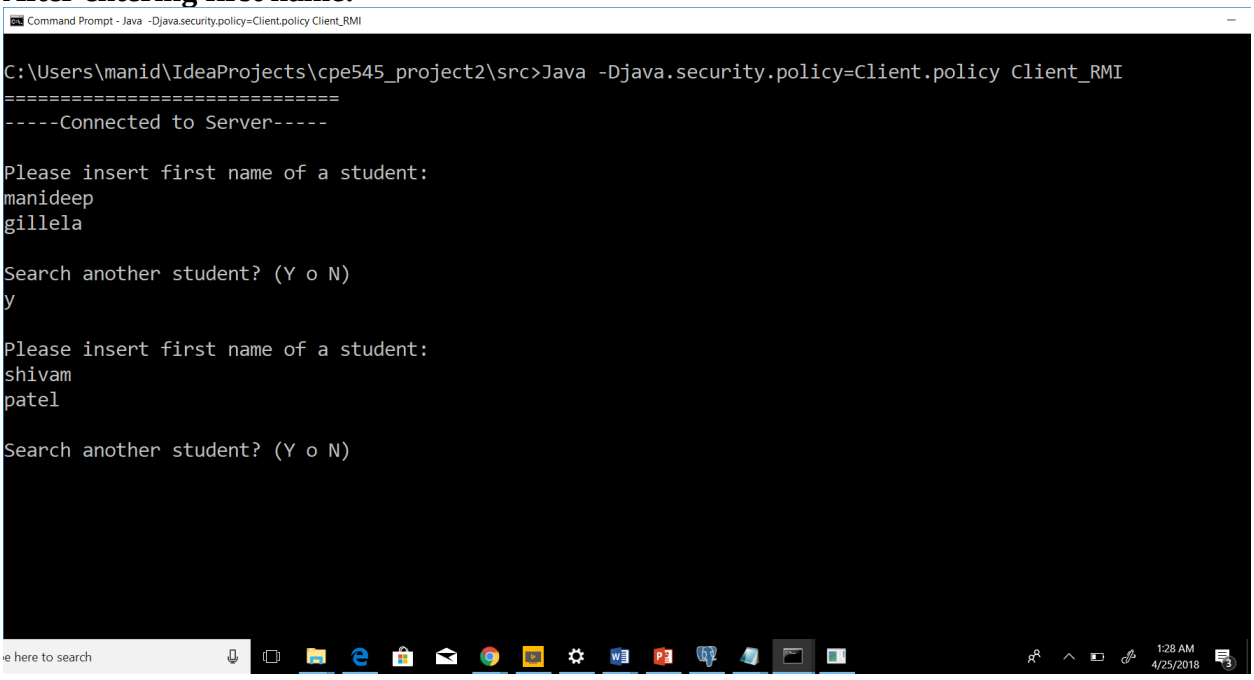
Starting server:



Starting client:



After entering first name:



Note: the name of the student is Case Sensitive