Homework 2

**Before you begin, update your operating system with any critical or recommended updates that Windows is suggesting and reboot the computer. You may install additional browsers on your server if you want; however, do not install additional anti-virus, firewall, or “optimizing” software. These can interfere with the software used in class.**

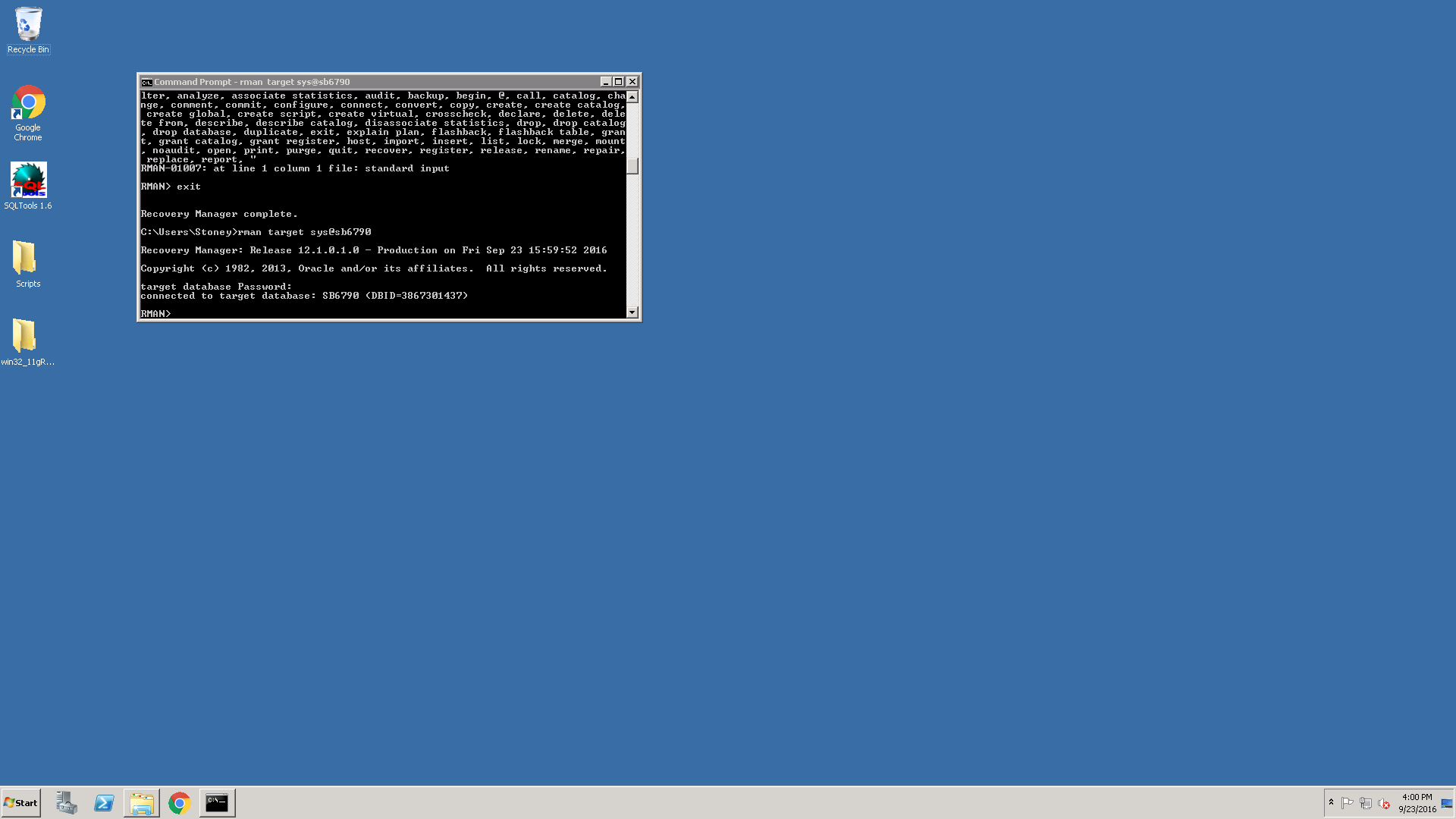
Complete the following activities in your assigned Windows server. The Oracle 12c R2 Server installation files have been copied to your server already in the “C:\Oracle\database” folder. You install the software by executing the “setup” program in that folder.

**NOTE: When taking screenshots, please make sure that your picture is of the information that I need to see, and that it is clear enough that I can read it. Small text in a screenshot of your entire desktop is impossible to read – and therefore incorrect.**

**Example:**



**This is Good!**



**This is Bad!**

1. Install the Oracle DBMS software with the following options:
   1. Choose not to receive security updates via My Oracle Support or email alerts.
   2. Skip software updates (they cost LOTS of money)
   3. Install database software only
   4. Install a single instance database
   5. Enterprise edition
   6. Choose to Create New Windows User with the following options
      1. Username: OracleOwner
      2. Password: Or4cl3P4$$
   7. Set the Oracle Base to C:\app\OracleOwner
2. Run the Net Configuration Assistant to create a listener. The new listener should monitor port 1521. The listener should accept connections over TCP.
3. Run the DBCA (Database Configuration Assistant) to create a database with the options:
   1. Choose Advanced configuration for the creation.
   2. Use the Transaction Processing template.
   3. For the Global Database Name (GDN) use your first and last initials, “6790”, and the IP address for your server. For example, student John Smith on a server with the address 10.12.0.200 would use “js6790.10.12.0.200” as the GDN. This would make the SID have the value “js6790”.
   4. Do **NOT** create as a Container Database.
   5. Use template file for database storage attributes
   6. Enable a fast recovery area. Set the area size to 20 GB.
   7. Enable archiving
   8. Choose to use the listener you created in step #2 above.
   9. Do not choose to use the database vault
   10. Enable Automatic Memory Management with the default memory size.
   11. Allow a maximum of 250 processes.
   12. Use the Unicode character set.
   13. Use the dedicated server mode.
   14. Install the sample schemas.
   15. Configure to use Enterprise Manager Express with port 5500
   16. You may choose to use the same password for all admin accounts or create different passwords. Either way, ensure that all passwords meet the Oracle recommended password complexity policy. (You will be **sharing this password** with me, so don’t use the same password as you use for your personal accounts outside of class.) **Do not use “@” in your passwords.** REMEMBER THIS PASSWORD – it will be the only way any of us can connect to the database later.
   17. Create Database and Generate database creation scripts. Have the scripts saved into a new folder on your desktop called “Scripts”
   18. If you receive a warning about the Fast Recovery Area size, continue
4. Access Enterprise Manager Express (EM Express) using a browser. I recommend Chrome.

The location of EM Express is https://<your IP address>:5500/em/

Login as SYS using the password that you specified in step 3p. Take a screenshot of the EM Express Home page that illustrates the instance is running. Make sure your database name and host address at the top of the browser window show in the screenshot.

**Oracle is a client/server application. The above steps installed the server software of the Oracle DBMS. This is not the same as the client software. The server software does not include the client software. To use the client software, it must be installed too.**

1. Download the Oracle Client software from the following website:

<https://drive.google.com/open?id=0B1abNXMFBsaWY3Z4X1ZfRUp2dk0>

1. Download SQL Tools v.1.8 from the following website:

<http://www.sqltools.net/index.html?frame=http%3A//www.sqltools.net/downloads.html>

1. If necessary, unzip and install the Oracle Client software using the “Runtime” option in the installation wizard.
2. Unzip and install the SQL Tools software.

Using SQL Tools, login to your database using the SYS account and the information you entered in step 3 above. Before connecting, add the following line to your sqlnet.ora file: SQLNET.ALLOWED\_LOGON\_VERSION=8

The file is located in (…/network/admin/sqlnet.ora). I recommend downloading Notepad++ for editing these files.

Take a screenshot of SQL Tools showing your SYS user logged in to the database.

**The Oracle client software and SQL Tools are installed on many computers in the BAS Computer Lab. You may also have it installed on your personal computer from when you took a previous database class.**

1. Access a computer other than your server that has the Oracle client and SQL Tools installed. If you do not already have it on your personal computer, you may install it there if you wish.
2. Login to your database using SQL Tools on this computer using the SYS account and the information that you entered in step 3.

* If you receive a TNS Timeout type error, look into your server firewall and if you are using SQLPlus, make sure you are using the 12c version, not the 11g.
* If you receive an invalid username/password error, double check that you entered the right information. If you have, change the password for the sys account in SQLPlus on your VM.
* If you receive a “Cannot save…..” error, close SQL Tools and run it as an administrator

1. Take a screenshot of SQL Tools on this computer showing your SYS user logged in to the database.

**NOTE:** From this point forward, every day that you log into your VM, find your archive log folder: C:\app\OracleOwner\fast\_recovery\_area\<SID>\<SID>\ARCHIVELOG

and delete out all of the logs except the previous day’s logs. For example, if it is 9/10, delete everything prior to 9/9.

**Submission Requirements:**

Submit the screenshots from steps 4, 8, and 11 in a MS Word document. Include your name, server IP address, and SYS password in the document above the screenshots. If you received an answer from a fellow student in the course’s Discussions, explain why you were unable to find the answer without this assistance and detail why the answer you were given works to address that particular problem.