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# **Installation Guide**

## **for tShop project**

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<b>Semester:</b>	<b>4</b>	
<b>Batch No:</b>	<b>F2-13-1607-T1</b>	
<b>Group No:</b>	<b>1</b>	
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## SYSTEM REQUIREMENT

All products, which are described in this file, are based on Microsoft® Window® 10, Win7, VISTA. Modify the steps if you are using a different version of Window.

System Requirement:

The table below list requirement for different installation options of **tShop**.

The notes that were identified here apply to both tables.

### 1. Hardware

#### 1.1 Web Server

Procesor	Pentium IV or higher
Memory	4GB of greater

#### 1.2 Client

Processor	Pentium IV or higher
Memory	4GB of greater
Monitor	Supper VGA(1366x786) or higher resolution with 256 colors.
Pointing Device	Microsoft Mouse, Microsoft IntelliMouse*, or compatible pointing device.
Modem/ADSL	Connecting to internet

### 2. Software

#### 2.1 Web Server

Operation System	Window 7 or higher
Browser	Internet Explorer 11 or Chrome 66
Database	Microsoft SQL Server 2012 or higher

Software	Java SDK 1.8 GlassFish Server 4.0
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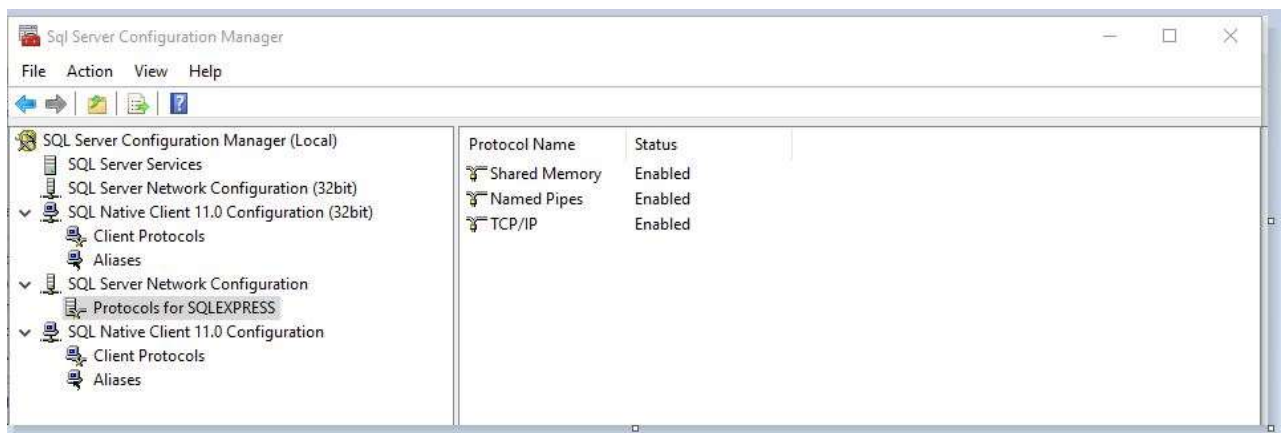
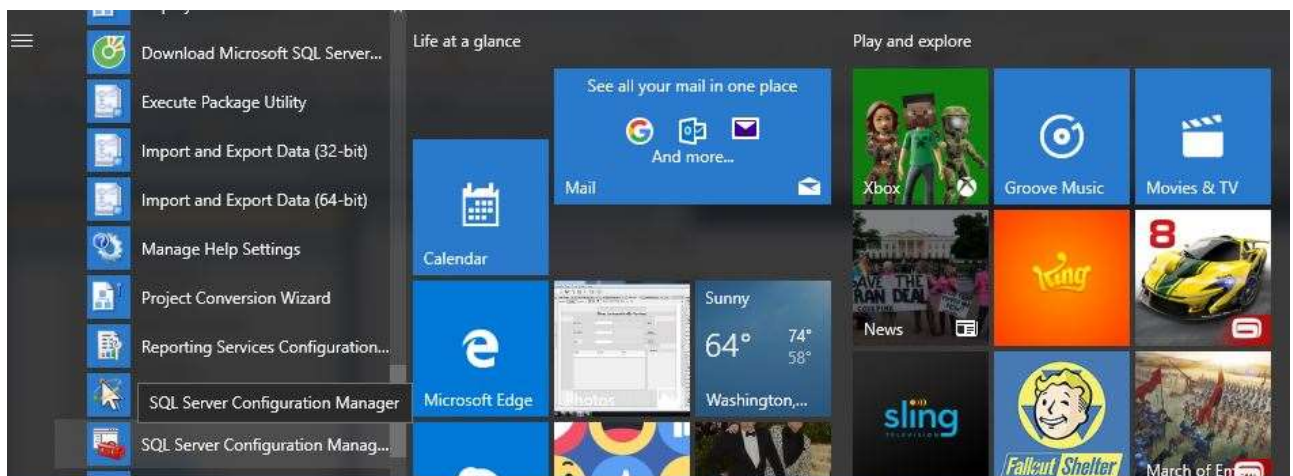
## 2.2 Client

Operation System	Window 7 or higher
Browser	Internet Explorer 11 or Chrome 66

### STEP 1: Set up Microsoft SQL Server 2012

#### 1. Open SQL Server Configuration Manager

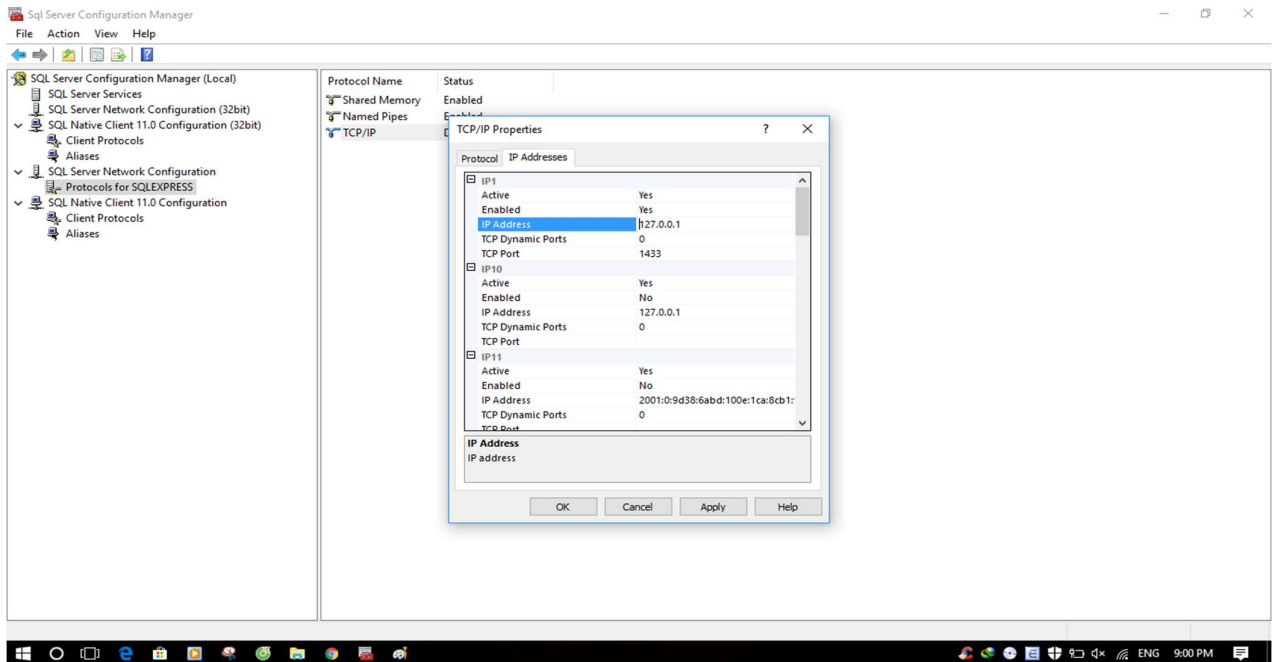
Start => All Programs => Microsoft SQL Server 2012 => SQL Server Configuration Manager.



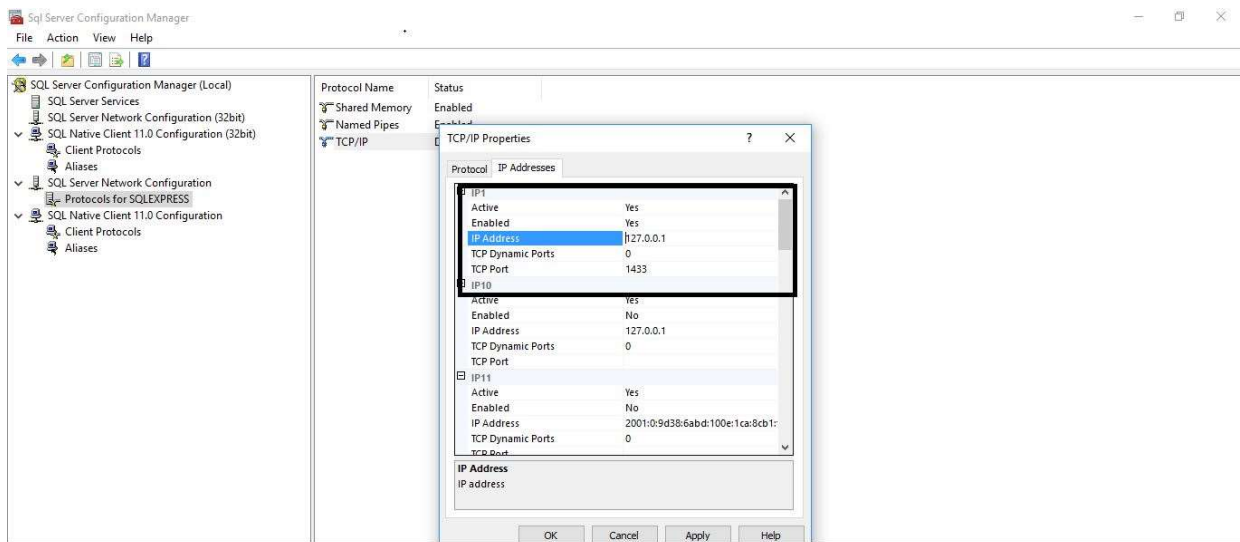
## 2. Configure TCP/IP

### Step 1: Set TCP/IP

Right click TCP/IP => Properties (in Protocols for SQLEXPRESS)



### Select IP Addresses tab



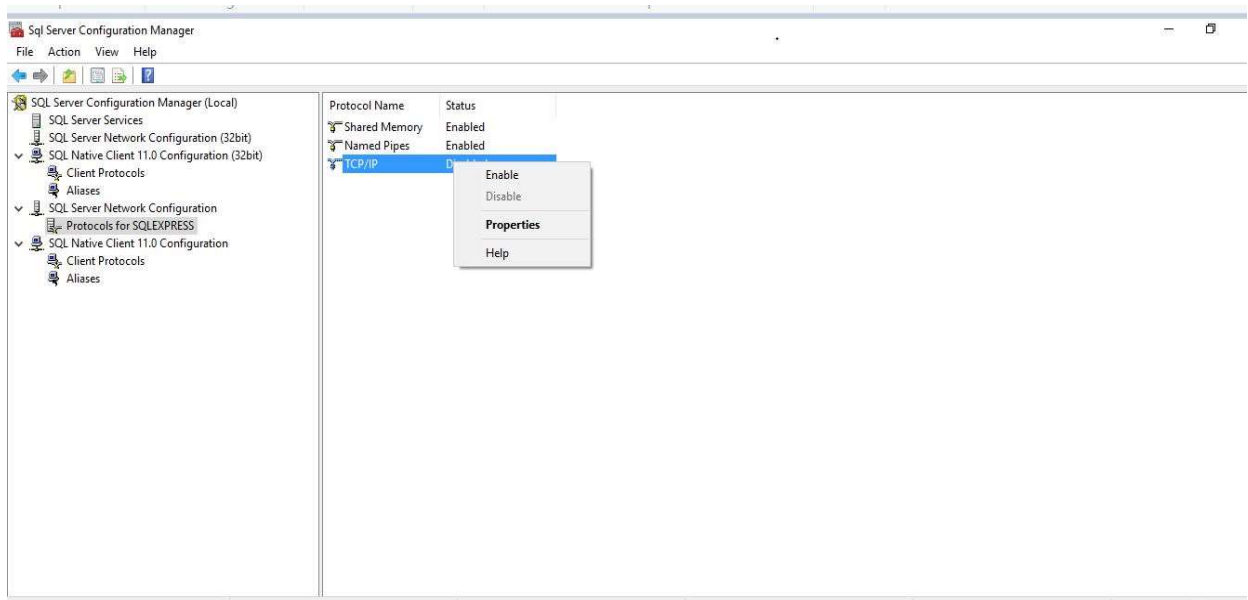
On IP1, set value for IP Address: 127.0.0.1, TCP Port: 1433

Click OK button

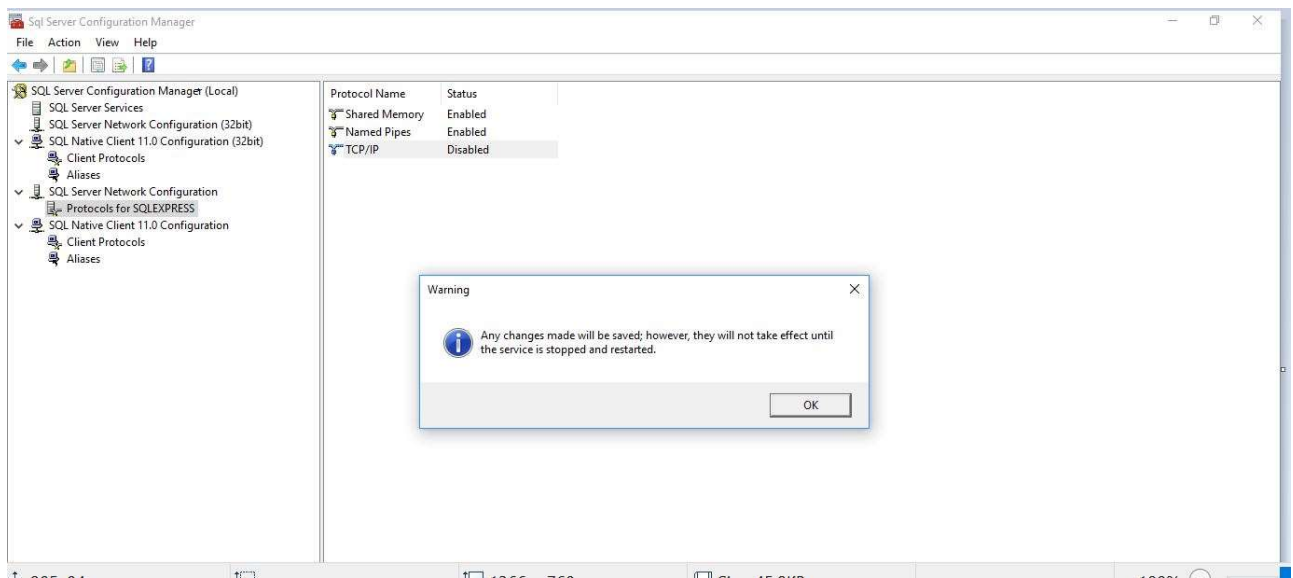
### Step 2:

Enable TCP/IP:

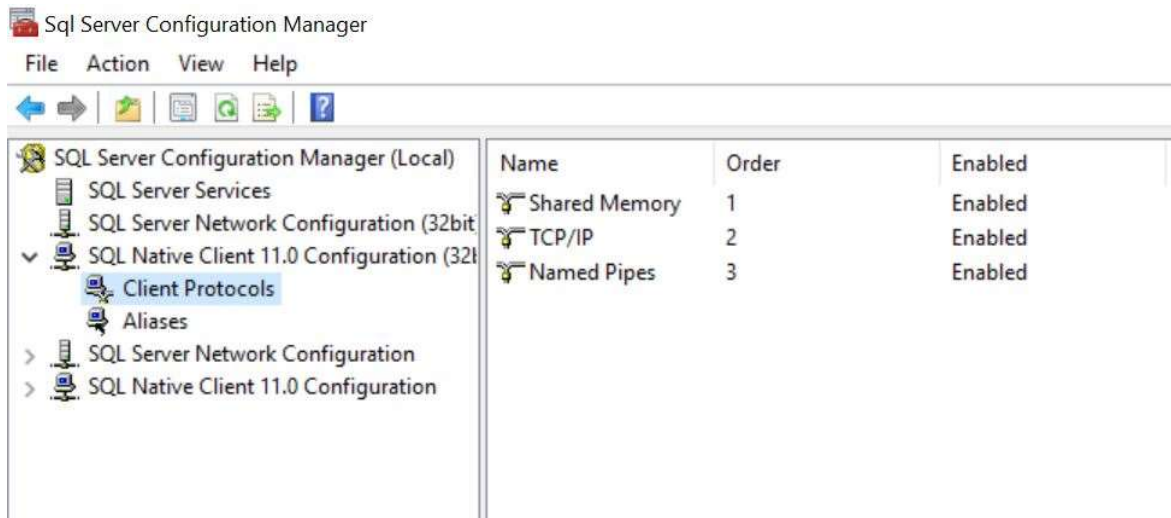
Right Click TCP/IP => Enable



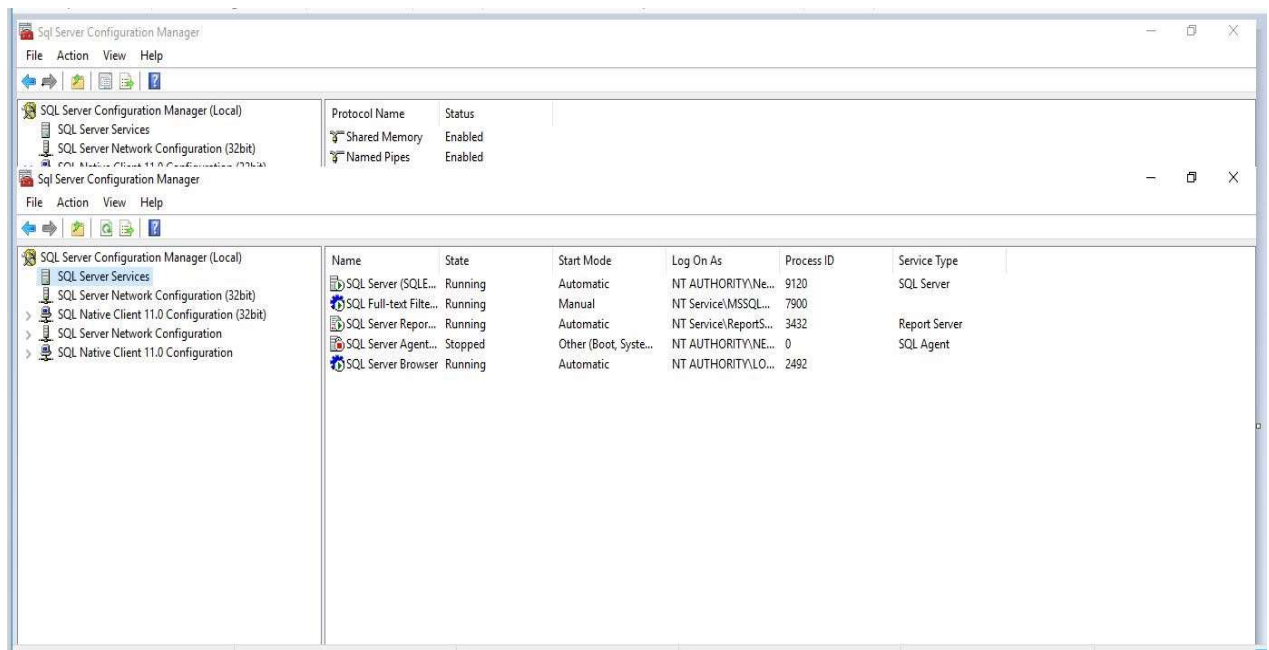
Select OK



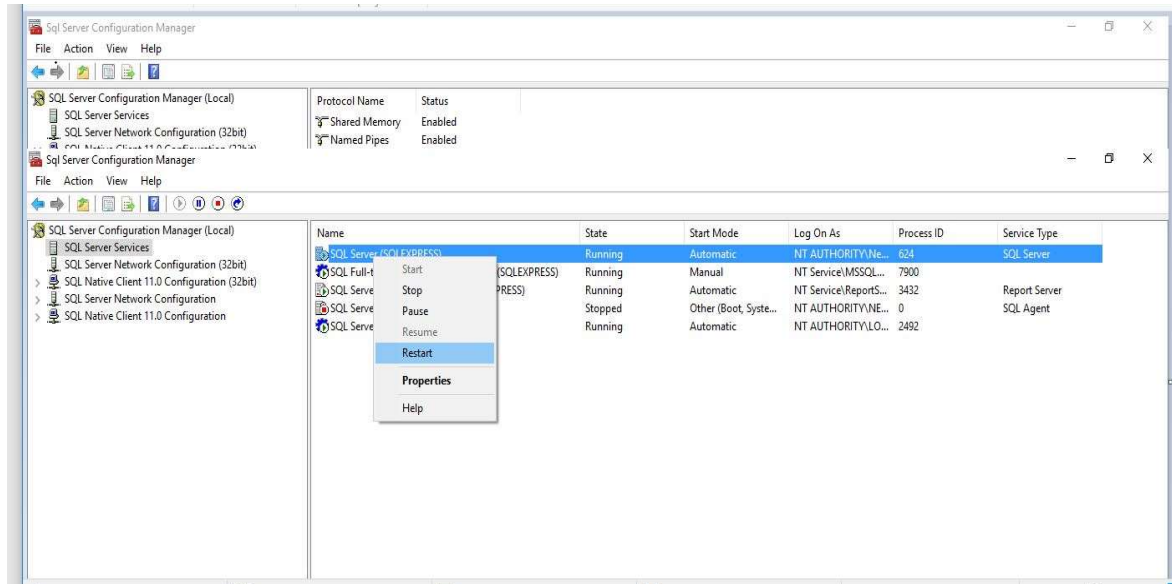
Result: TCP/IP is enabled



**Step 3:** Restart SQL Server 2012 to apply changes:



Select SQL Server Services => Right click SQL Server(SQLEXPRESS) => Restart



## STEP 2: Install Database

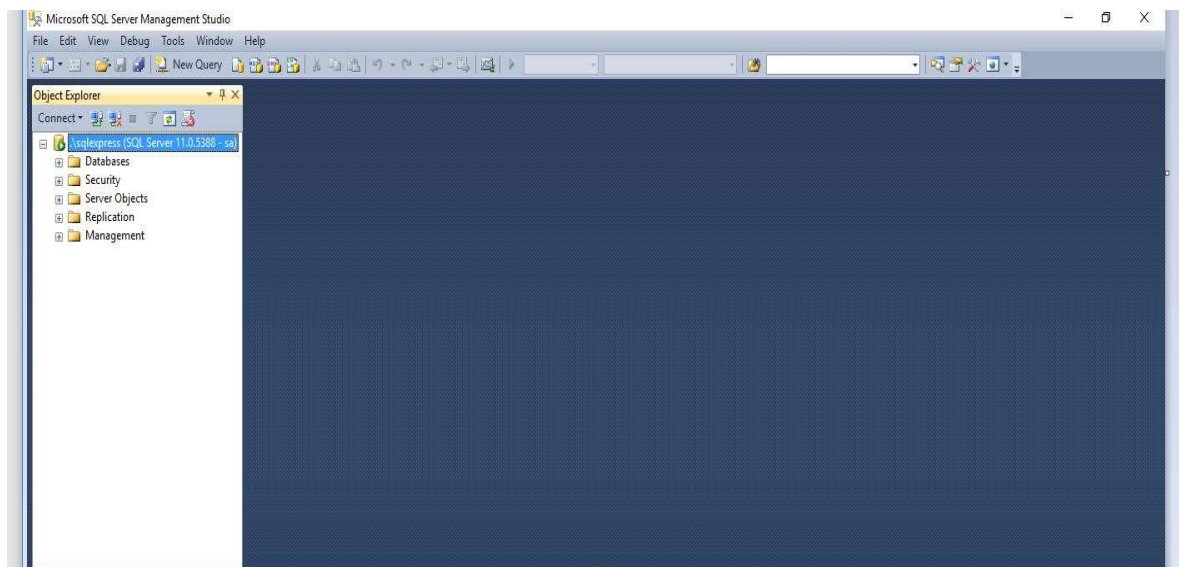
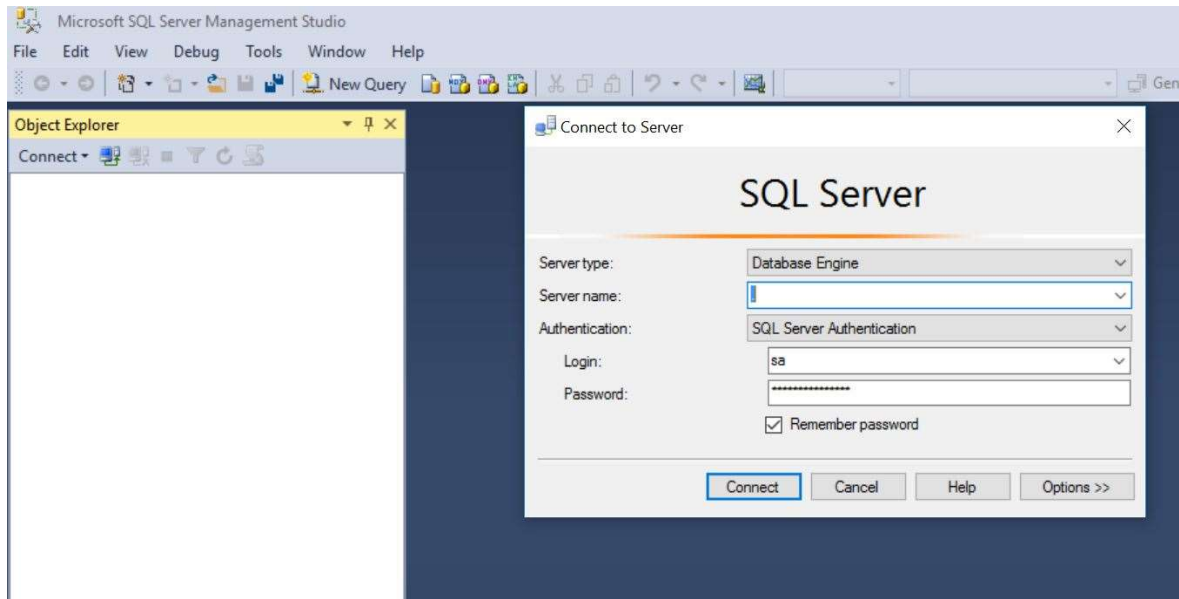
1. Open MS SQL Server Management Studio:

Start => All Programs => Microsoft SQL Server 2012 => SQL Server Management Studio



Input your login name and password => Click “Connect” button



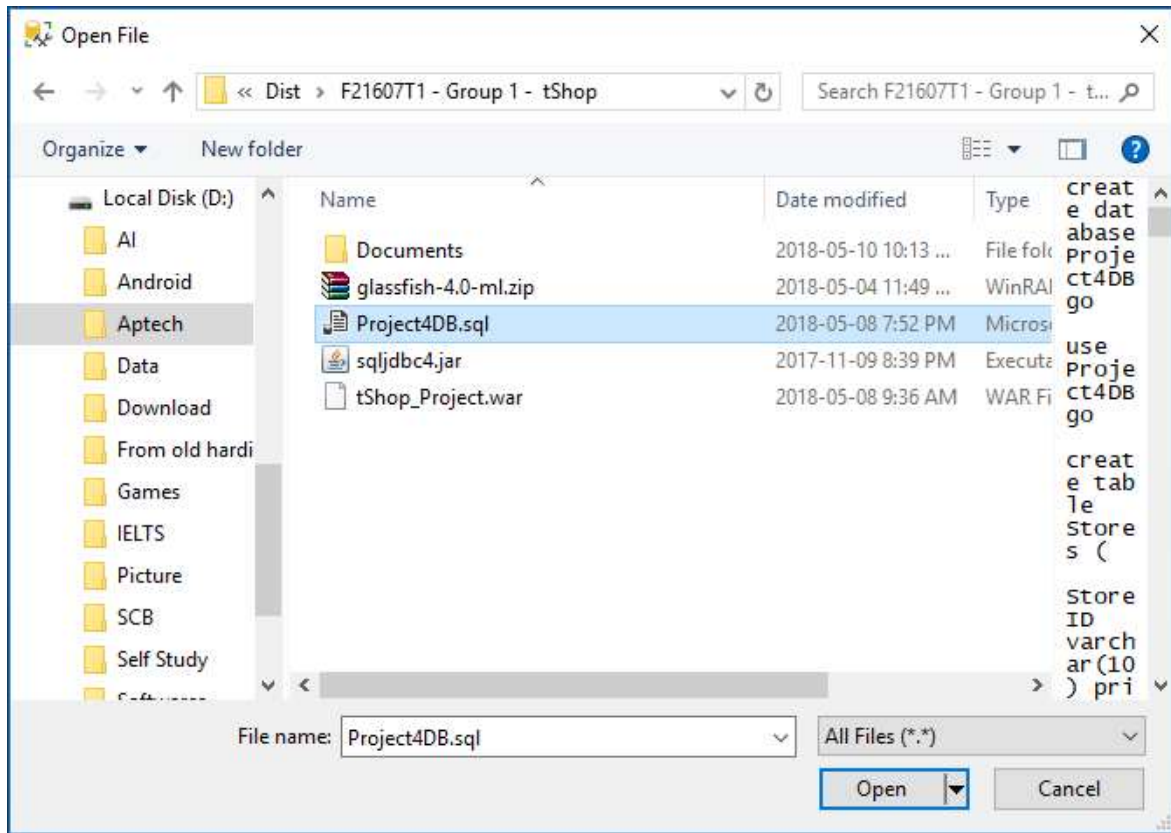


## 2. Setup database:

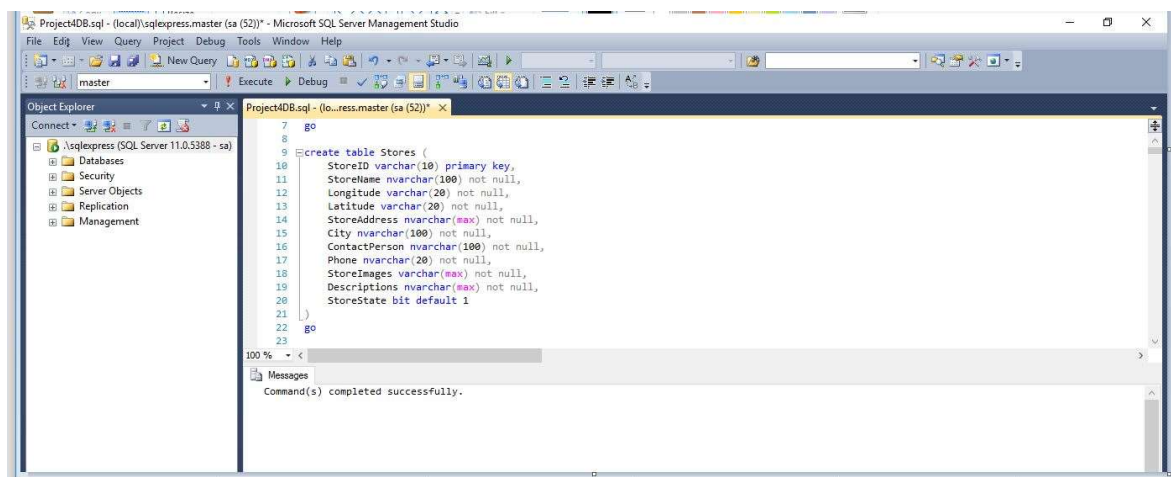
Open **Project4DB.sql** file to setup database:

In Menu choose : File => Open => Files...

Select **Project4DB.sql** file in “F21607T1 – Group 1 – tShop” folder => click Open

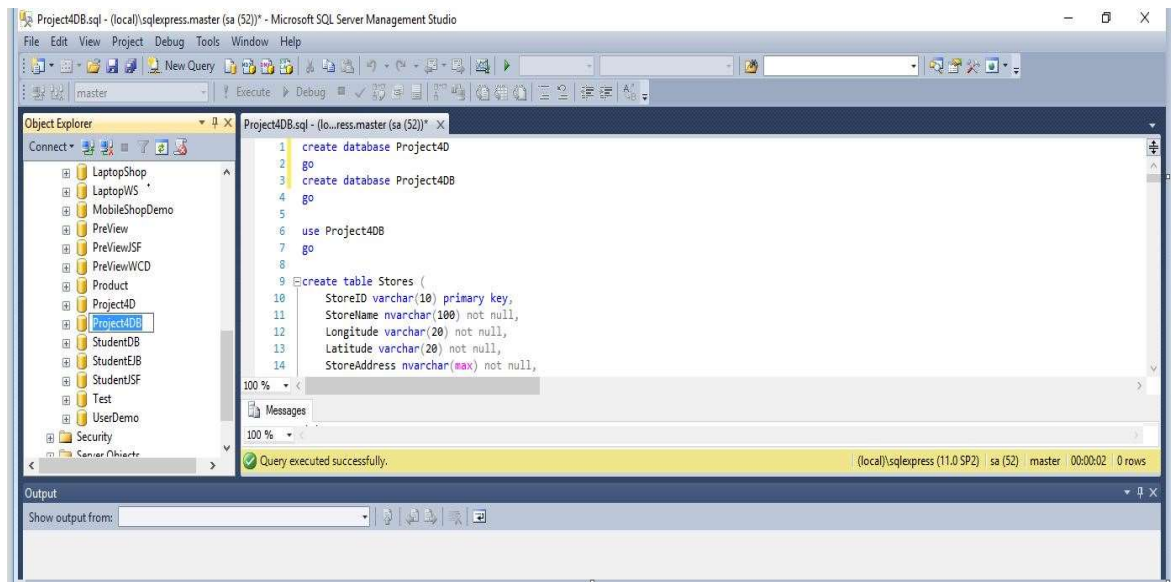


Execute Project4DB.sql file to create Project4DB database(Click “Execute” button on toolbar or Press F5 on keyboard).



Right click Database => Refresh

Result : Appear the Project4DB database in Databases folder



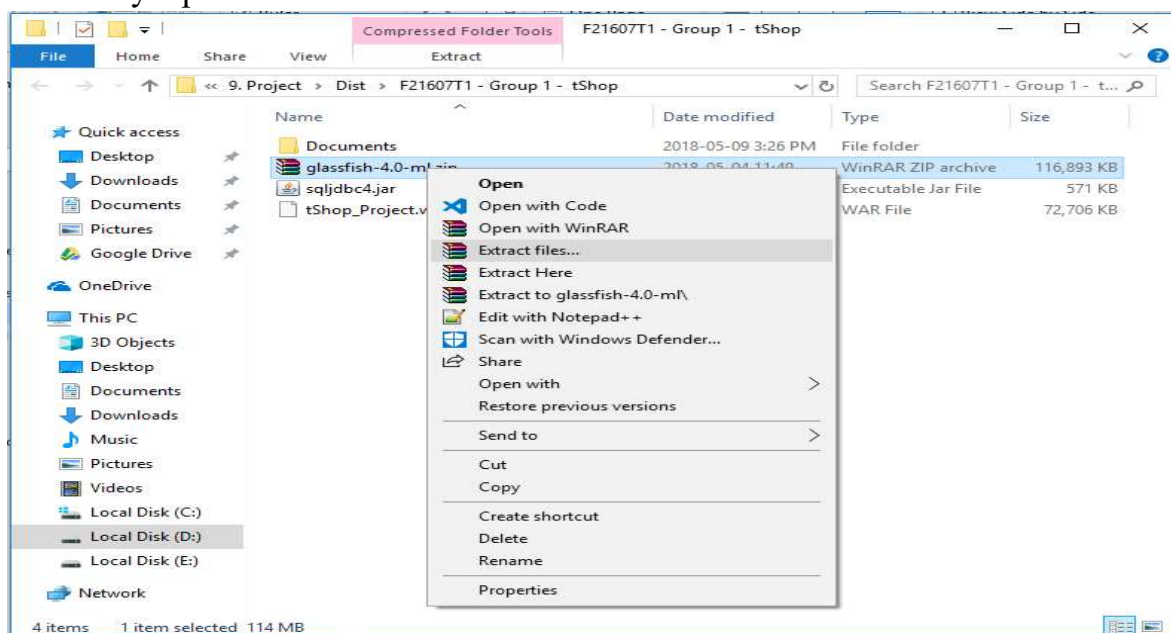
Create Database successfully.

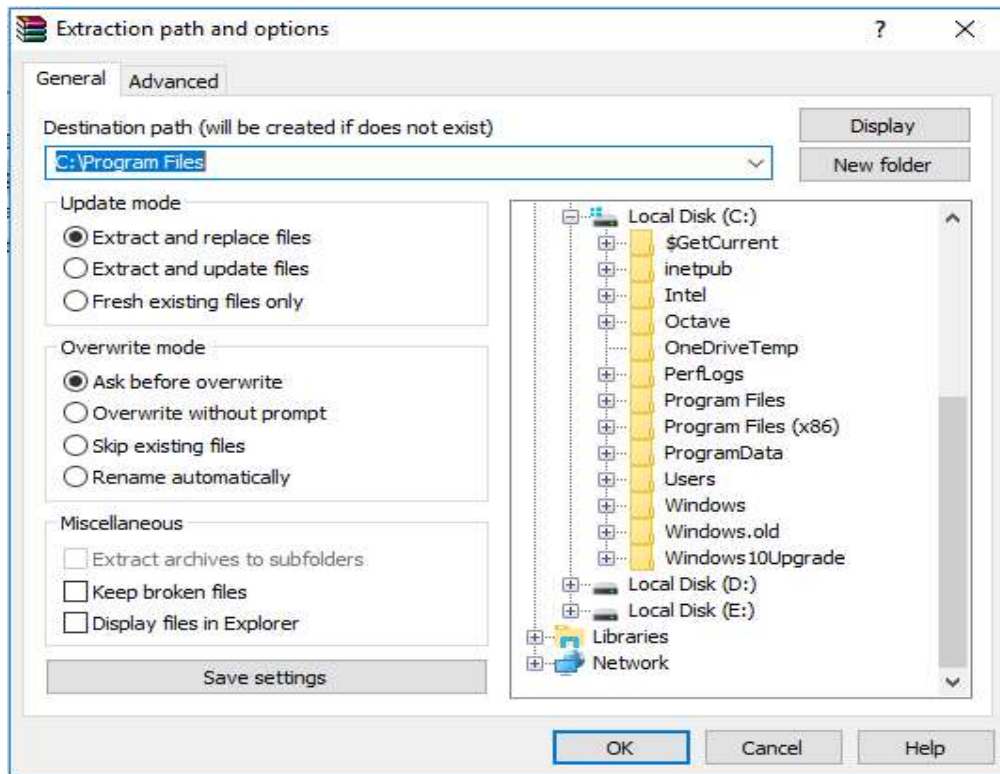
### STEP 3: Deploy website on GlassFish 4.0 Server

All needed files for deploying website are contained in folder “F21607T1 – Group 1 - tShop”.

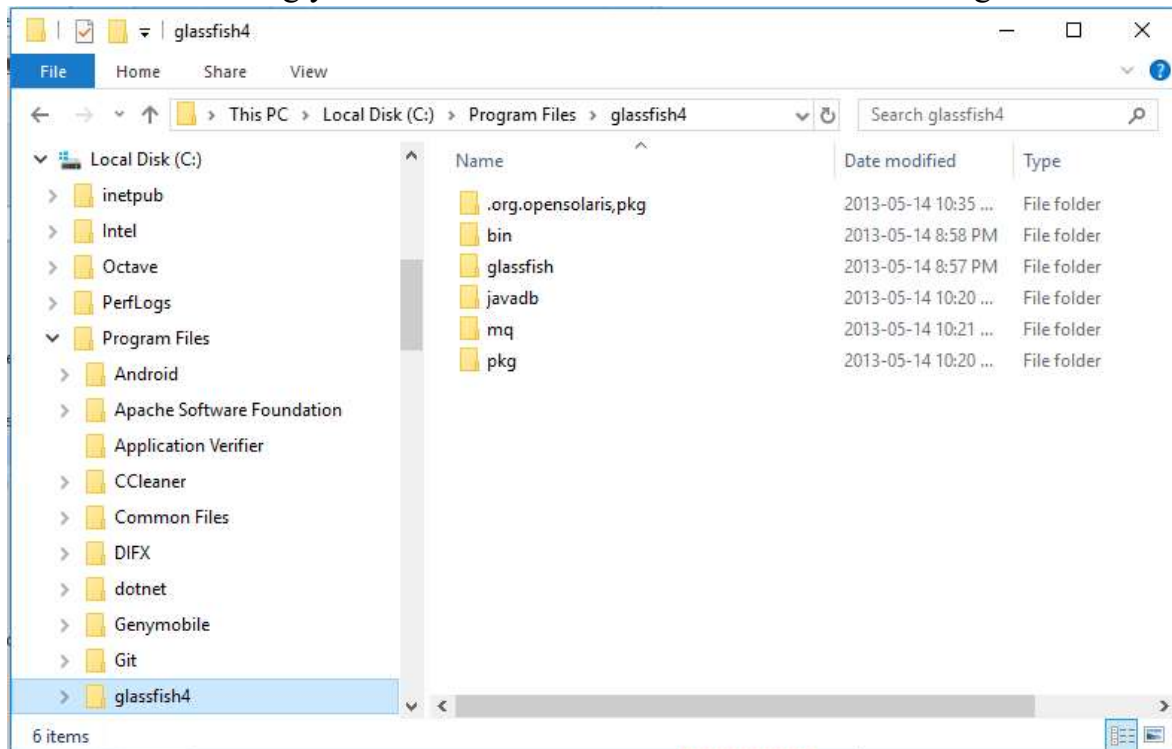
#### 1. Install GlassFish 4.0 Server

Extract file “glassfish-4.0-ml.zip” to “C:\Program Files” using WinRAR or any zip extractors.





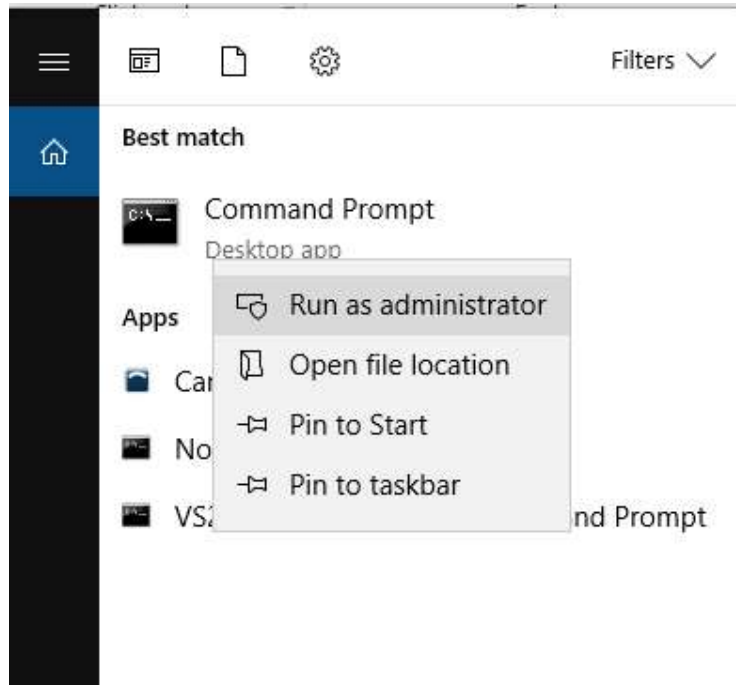
After extracting you will see GlassFish server's folder in C:\Program Files



## 2. Start server using the *asadmin* Utility

### a. Run *asadmin.bat*

Run Windows Command Prompt as Administrator role



Type "c:\Program Files\glassfish4\bin\asadmin.bat"

```
Administrator: Command Prompt - "c:\Program Files\glassfish4\bin\asadmin.bat"
Microsoft Windows [Version 10.0.16299.371]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\WINDOWS\system32>"c:\Program Files\glassfish4\bin\asadmin.bat"
Use "exit" to exit and "help" for online help.
asadmin>
```

🚩 Guide for “GlassFish requires Java SE version 6. Your JDK is version 0” Error when run **asadmin.bat**

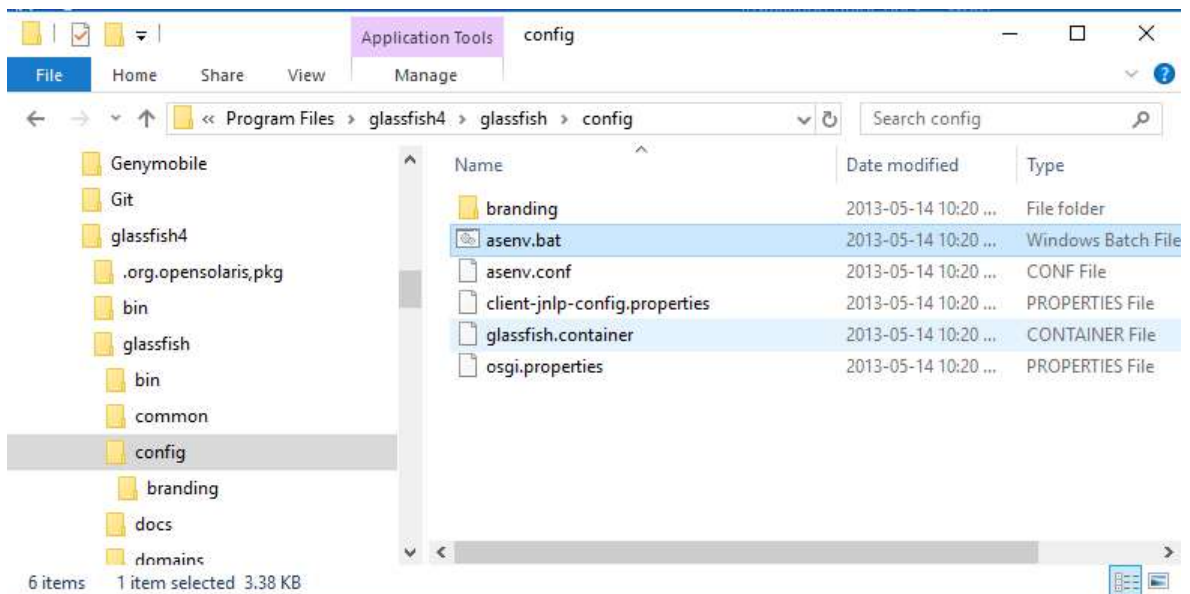
```
Command Prompt
Microsoft Windows [Version 10.0.16299.371]
(c) 2017 Microsoft Corporation. All rights reserved.

C:\Users\thang>cd "C:\Program Files\glassfish4\bin"

C:\Program Files\glassfish4\bin>asadmin.bat
GlassFish requires Java SE version 6. Your JDK is version 0

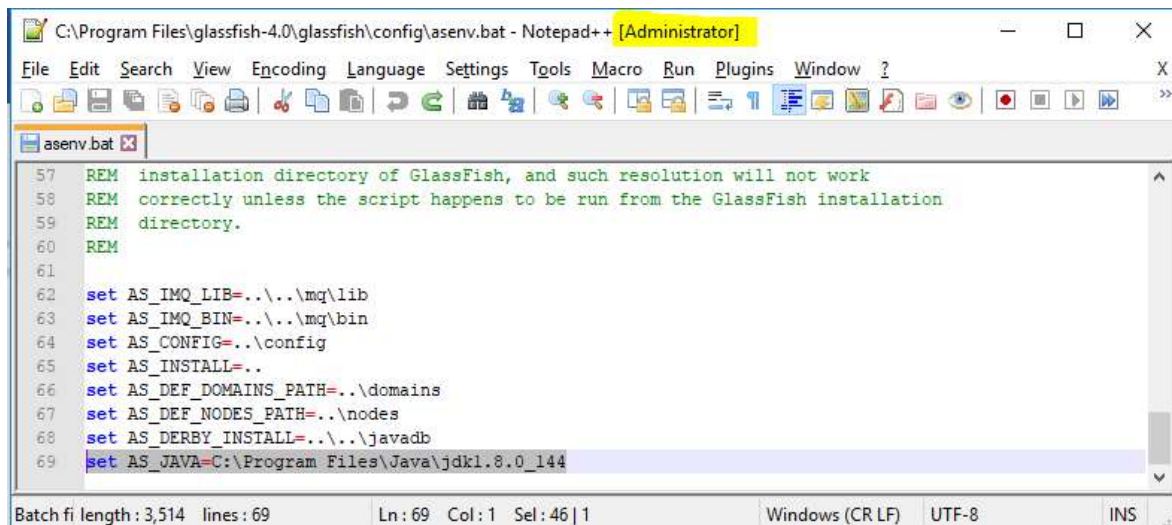
C:\Program Files\glassfish4\bin>
```

+ Step 1: Open file **asenv.bat** in folder “glassfish4\glassfish\config” with any Editor applications such as Notepad++ as Administrator role



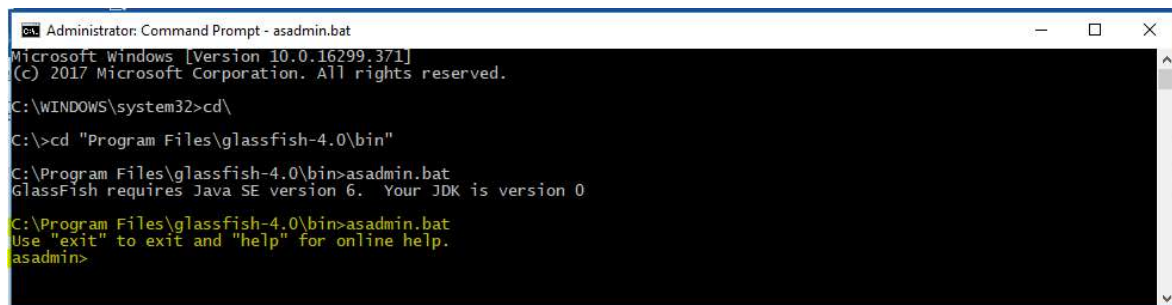


+ Step 2: Add “set AS\_JAVA=[JDK 1.8 Folder’s Path]” like this:



```
C:\Program Files\glassfish-4.0\glassfish\config\asenv.bat - Notepad++ [Administrator]
File Edit Search View Encoding Language Settings Tools Macro Run Plugins Window ?
asenv.bat
57 REM installation directory of GlassFish, and such resolution will not work
58 REM correctly unless the script happens to be run from the GlassFish installation
59 REM directory.
60 REM
61
62 set AS_IMQ_LIB=...\mq\lib
63 set AS_IMQ_BIN=...\mq\bin
64 set AS_CONFIG=..\config
65 set AS_INSTALL=..
66 set AS_DEF_DOMAINS_PATH=..\domains
67 set AS_DEF_NODES_PATH=..\nodes
68 set AS_DERBY_INSTALL=...\javadb
69 set AS_JAVA=C:\Program Files\Java\jdk1.8.0_144
Batch file length: 3,514 lines: 69 Ln: 69 Col: 1 Sel: 46 | 1 Windows (CR LF) UTF-8 INS
```

+ Step 3: Save and close **asenv.bat** and run **asadmin.bat** again:



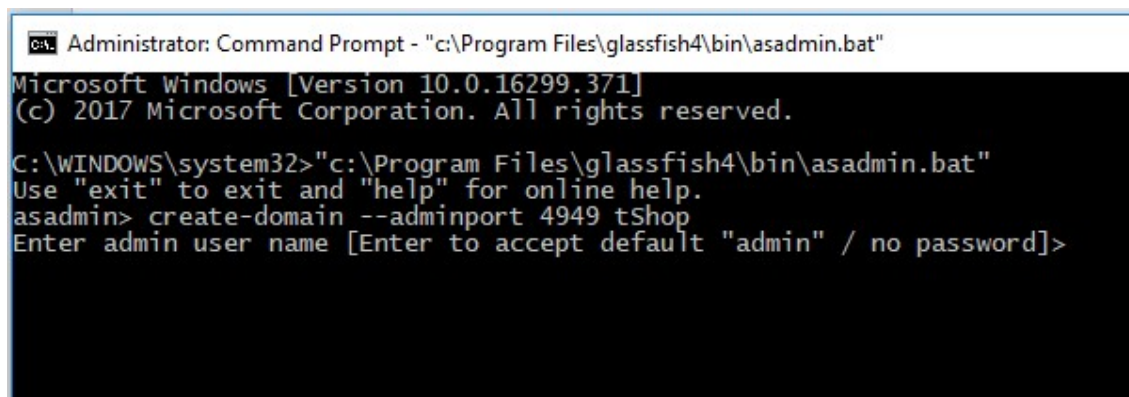
```
Administrator: Command Prompt - asadmin.bat
Microsoft Windows [Version 10.0.16299.371]
(c) 2017 Microsoft Corporation. All rights reserved.
C:\WINDOWS\system32>cd\
C:\>cd "Program Files\glassfish-4.0\bin"
C:\Program Files\glassfish-4.0\bin>asadmin.bat
GlassFish requires Java SE version 6. Your JDK is version 0
C:\Program Files\glassfish-4.0\bin>asadmin.bat
Use "exit" to exit and "help" for online help.
asadmin>
```

You run it successfully.

## b. Create domain

Type “create-domain --adminport 4949 tShop” to create a new domain at port 4949 (you can use any port in range 1 - 65535) with name tShop.

You will be asked to enter admin user name. Let press Enter to accept default value “admin” and no password.



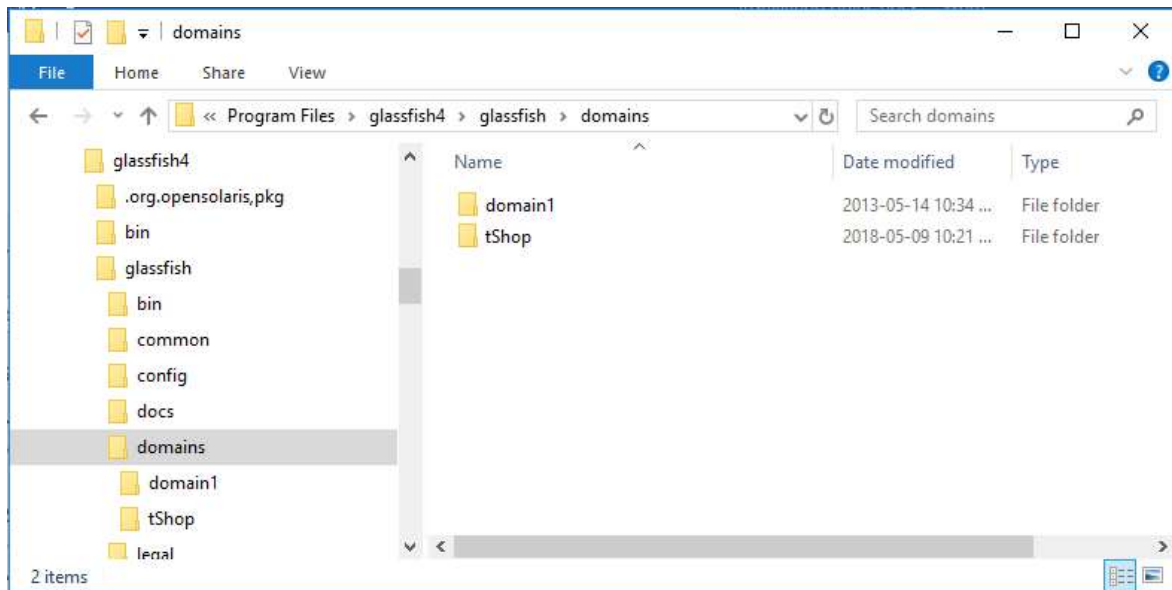
```
Administrator: Command Prompt - "c:\Program Files\glassfish4\bin\asadmin.bat"
Microsoft Windows [Version 10.0.16299.371]
(c) 2017 Microsoft Corporation. All rights reserved.
C:\WINDOWS\system32>"c:\Program Files\glassfish4\bin\asadmin.bat"
Use "exit" to exit and "help" for online help.
asadmin> create-domain --adminport 4949 tShop
Enter admin user name [Enter to accept default "admin" / no password]>
```

It will take a few second to create domain. After creating, you will see this:

```
Administrator: Command Prompt - "c:\Program Files\glassfish4\bin\asadmin.bat"
asadmin> create-domain --adminport 4949 tShop
Enter admin user name [Enter to accept default "admin" / no password]>
Using port 4949 for Admin.
Using default port 8080 for HTTP Instance.
Using default port 7676 for JMS.
Using default port 3700 for IIOP.
Using default port 8181 for HTTP_SSL.
Using default port 3820 for IIOP_SSL.
Using default port 3920 for IIOP_MUTUALAUTH.
Using default port 8686 for JMX_ADMIN.
Using default port 6666 for OSGI_SHELL.
Using default port 9009 for JAVA_DEBUGGER.
Distinguished Name of the self-signed X.509 Server Certificate is:
[CN=ThangNguyen,OU=GlassFish,O=Oracle Corporation,L=Santa Clara,ST=California,C=US]
Distinguished Name of the self-signed X.509 Server Certificate is:
[CN=ThangNguyen-instance,OU=GlassFish,O=Oracle Corporation,L=Santa Clara,ST=California,C=US]
Domain tShop created.
Domain tShop admin port is 4949.
Domain tShop allows admin login as user "admin" with no password.
Command create-domain executed successfully.
asadmin>
```

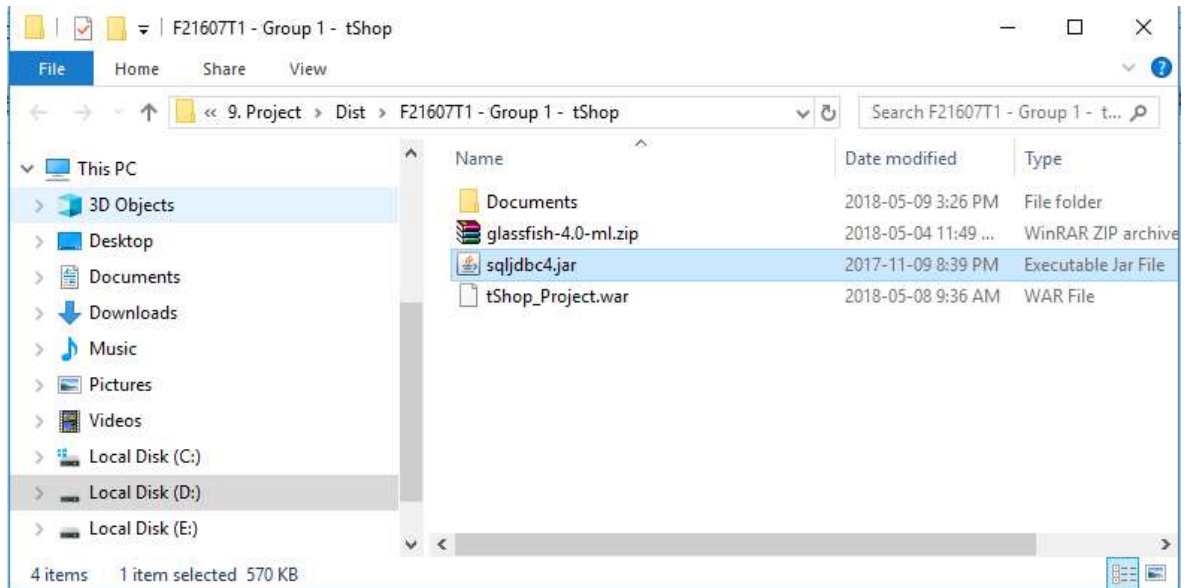
### c. Start domain

Let check folder “C:\Program Files\glassfish4\glassfish\domains” you will see tShop domain in there.

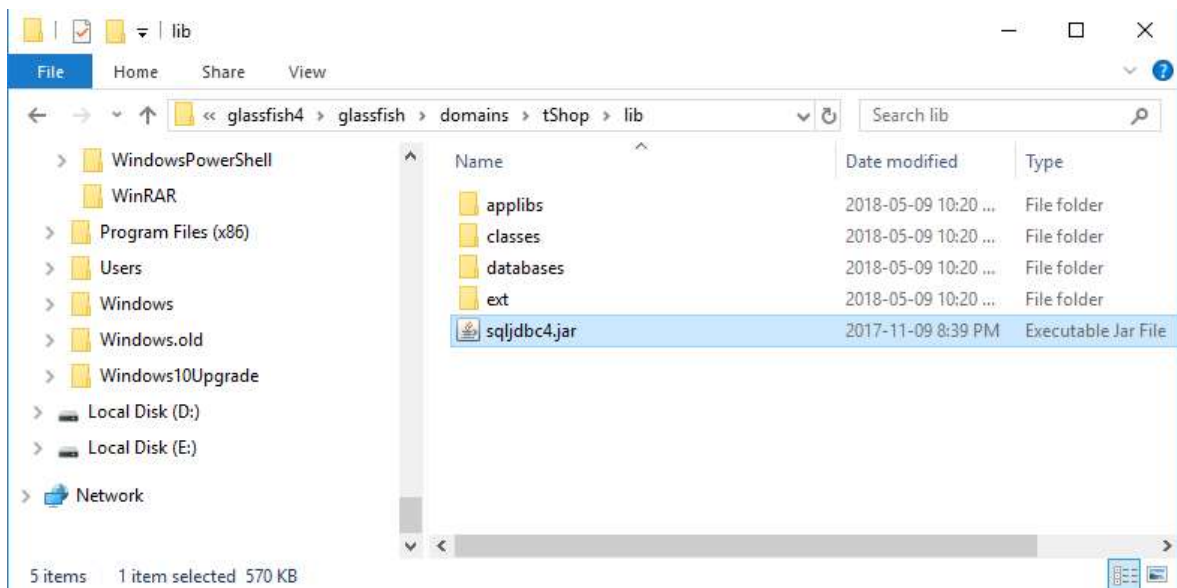


Now go back to folder “F21607T1 – Group 1 – tShop” and copy file **sqljdbc4.jar**





And paste to folder “glassfish4\glassfish\domains\tShop\lib”



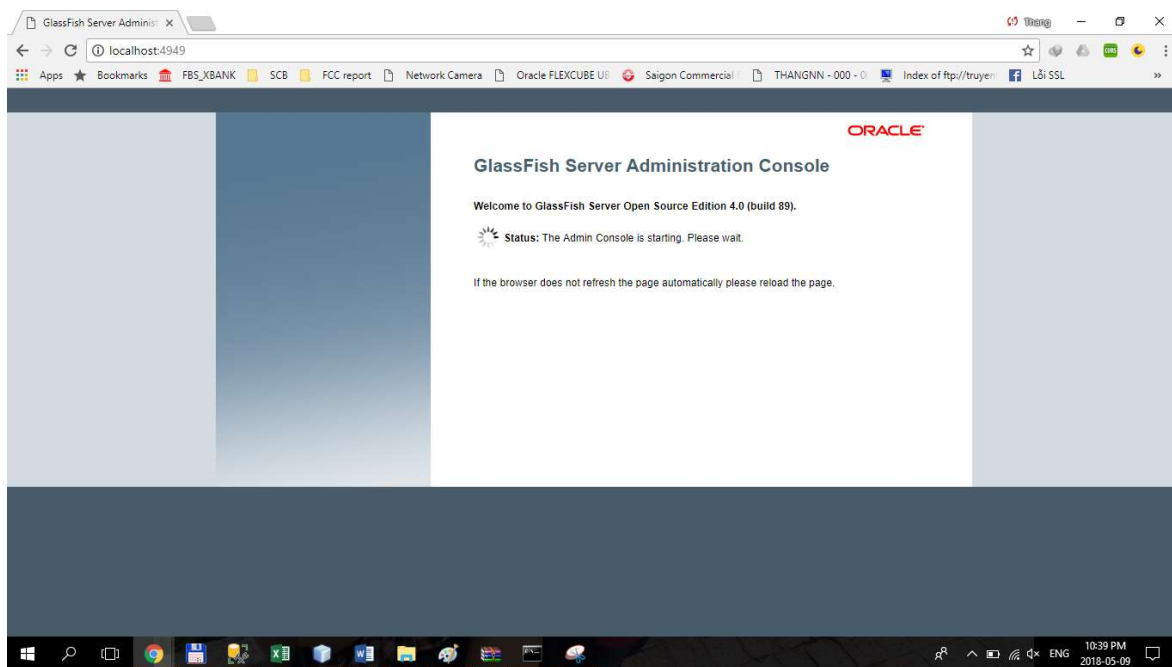
Now back to Command Prompt window, and type “start-domain tShop” and wait a little time for domain being started.

```
Administrator: Command Prompt - "c:\Program Files\glassfish4\bin\asadmin.bat"
asadmin> start-domain tShop
Waiting for tShop to start .....
Successfully started the domain : tShop
domain Location: C:\Program Files\glassfish4\glassfish\domains\tShop
Log File: C:\Program Files\glassfish4\glassfish\domains\tShop\logs\server.log
Admin Port: 4949
Command start-domain executed successfully.
asadmin>
```

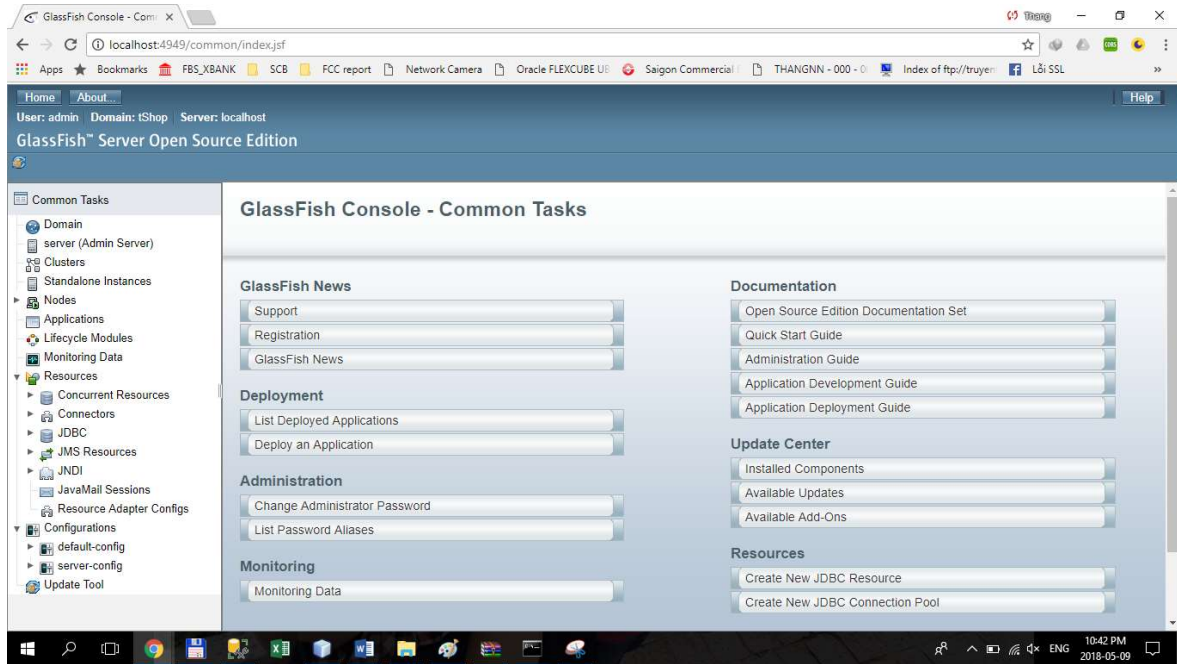
Server is running now.

### 3. Deploy website

Using Chrome or any browser and type URL “localhost:4949” (4949 is tShop domain’s port)

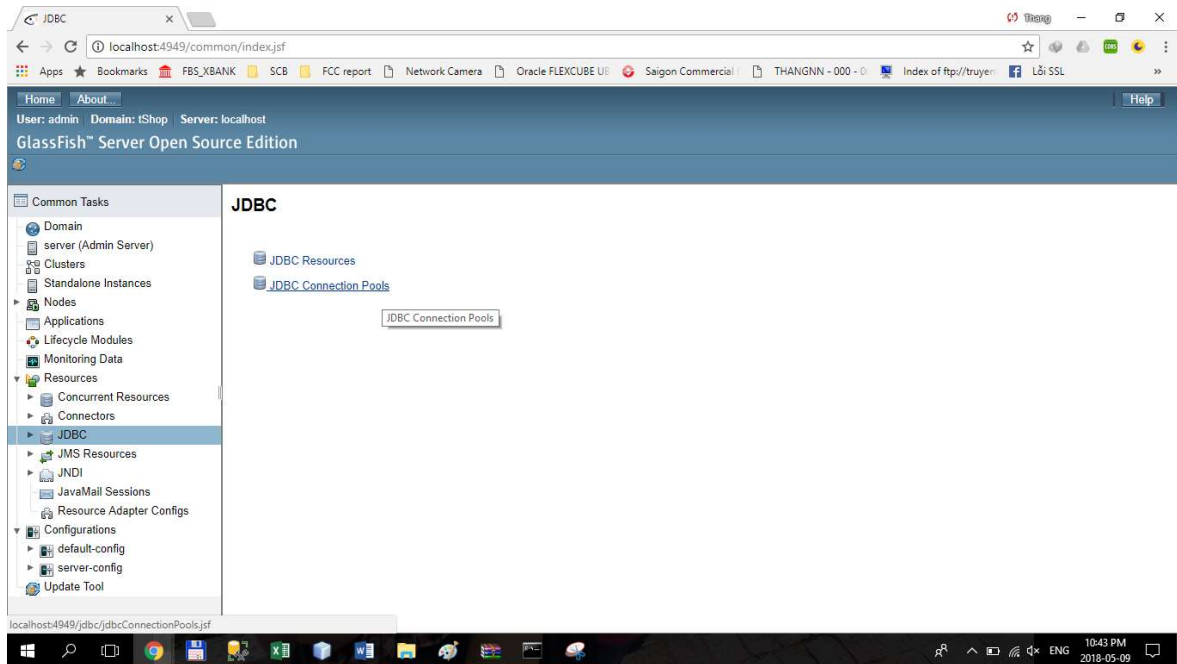


You will log in as admin with no password automatically. After logging in, you will see the GlassFish Console

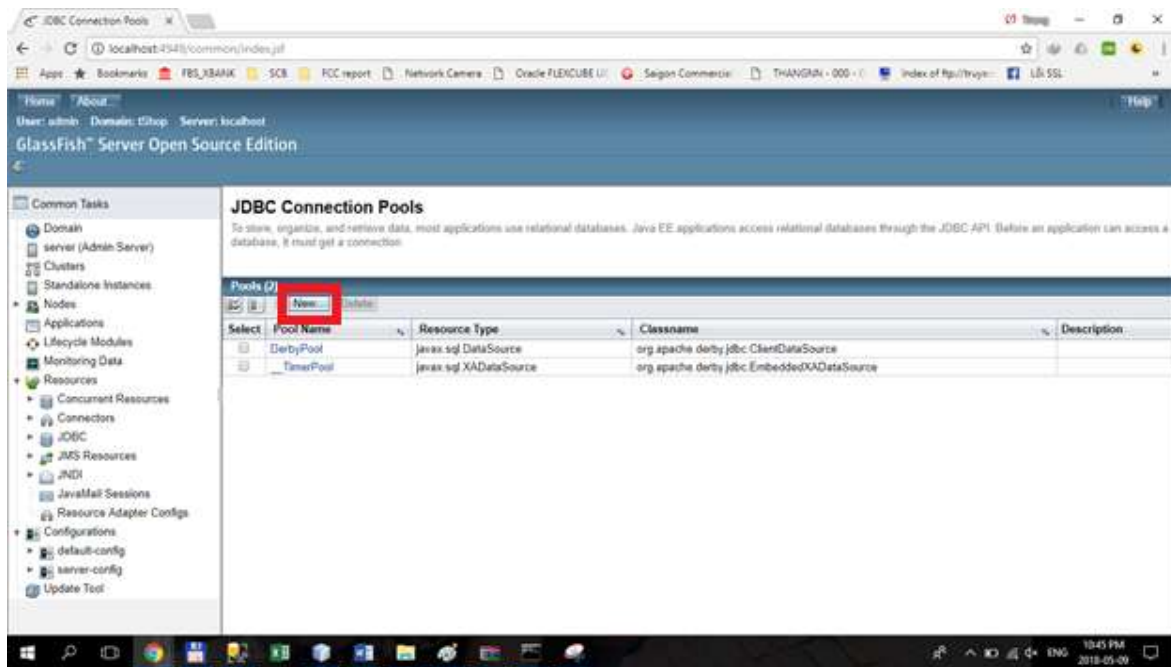


### a. Create jdbc connection pool

Click JDBC => JDBC Connection Pools



And click New button



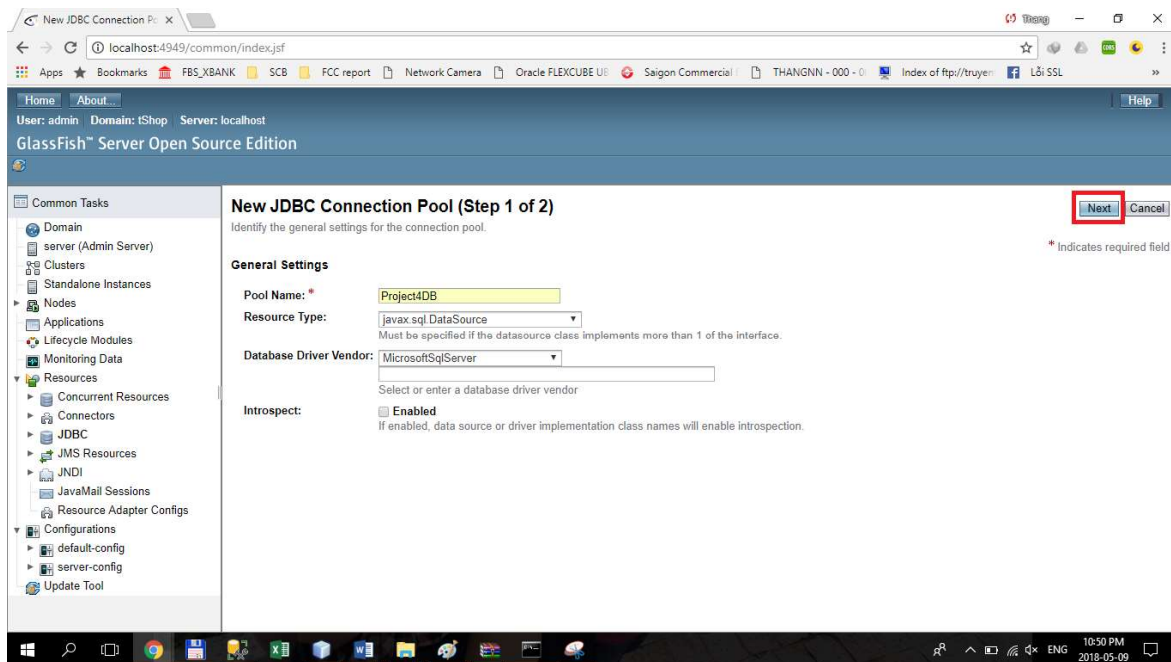
In next screen, you input 3 fields with values as below:

+ Pool Name: **Project4DB**

+ Resource Type: **javax.sql.DataSource**

+ Database Driver Vendor: **MicrosoftSqlServer**

And then click Next button.



In next screen, let scroll down to see “Additional Properties” panel. You select fields and input values as below:

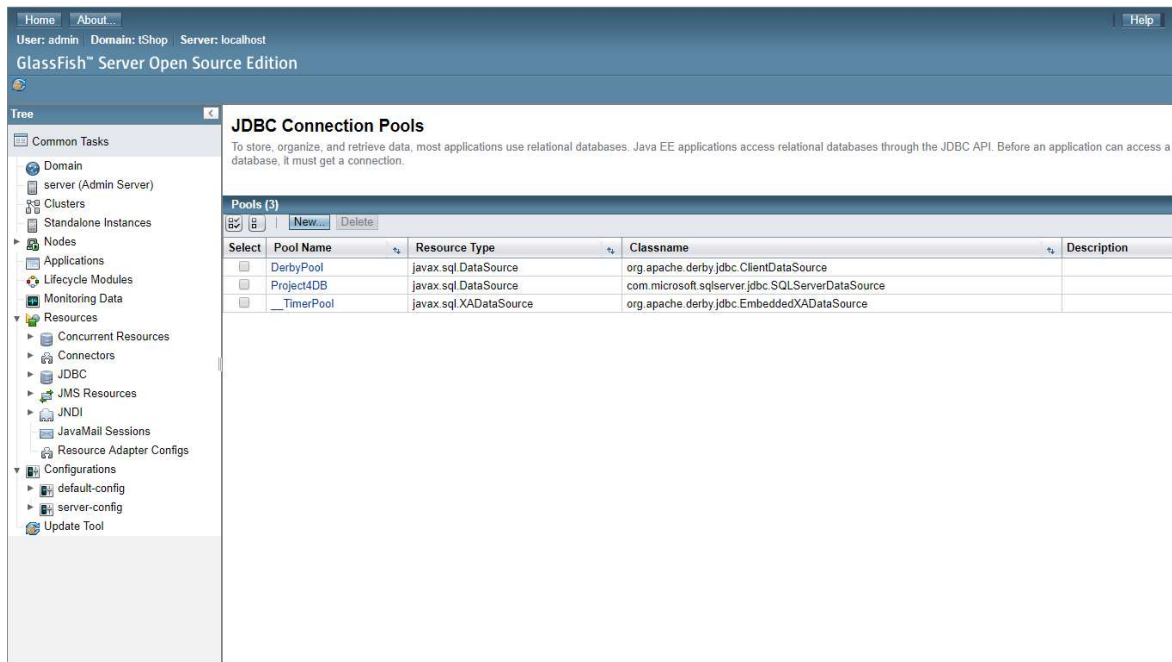
- + User: your user to connect to SQL Server (be usually “sa”)
- + Password: your password to connect to SQL Server
- + DatabaseName: **Project4DB**
- + ServerName: **localhost**
- + PortNumber: **1433**

Select	Name	Value	Description
<input type="checkbox"/>	Description		
<input type="checkbox"/>	TrustServerCertificate	false	
<input checked="" type="checkbox"/>	User	sa	
<input type="checkbox"/>	LastUpdateCount	true	
<input type="checkbox"/>	ResponseBuffering	adaptive	
<input type="checkbox"/>	URL	jdbc:sqlserver://	
<input type="checkbox"/>	XopenStates	false	
<input type="checkbox"/>	PacketSize	8000	
<input checked="" type="checkbox"/>	Password	123	
<input type="checkbox"/>	FailoverPartner		
<input type="checkbox"/>	ApplicationName	Microsoft JDBC Driver for SQL Server	
<input checked="" type="checkbox"/>	DatabaseName	Project4DB	
<input type="checkbox"/>	TrustStore		
<input type="checkbox"/>	Encrypt	false	
<input type="checkbox"/>	LockTimeout	-1	
<input type="checkbox"/>	SendStringParametersAsUnicode	true	
<input type="checkbox"/>	AuthenticationScheme		
<input type="checkbox"/>	InstanceName		
<input type="checkbox"/>	MultiSubnetFailover	false	
<input type="checkbox"/>	IntegratedSecurity		
<input type="checkbox"/>	ApplicationIntent	readwrite	
<input type="checkbox"/>	LoginTimeout	15	
<input type="checkbox"/>	WorkstationID	ThangNguyen	
<input checked="" type="checkbox"/>	ServerName	localhost	
<input type="checkbox"/>	HostNameInCertificate		
<input checked="" type="checkbox"/>	PortNumber	1433	

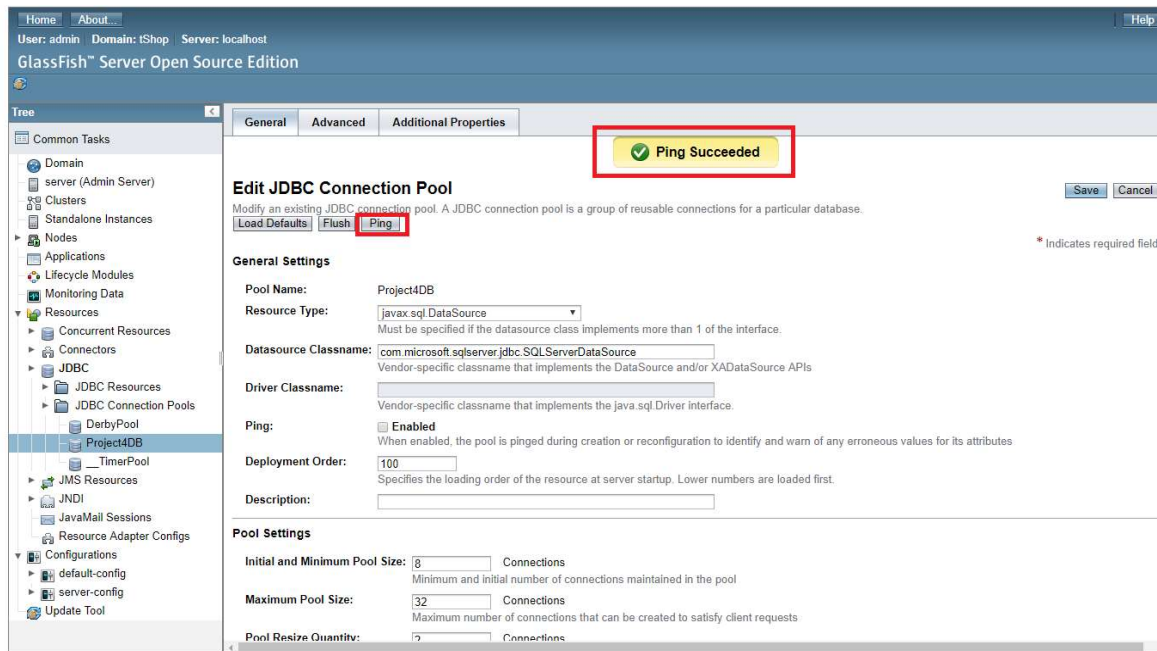
And then click Finish button

<input checked="" type="checkbox"/>	PortNumber	1433	
<input type="checkbox"/>	SelectMethod	direct	
<input type="checkbox"/>	TrustStorePassword		
<input type="checkbox"/>	SendTimeAsDatetime	true	

You created a new jdbc connection pool.



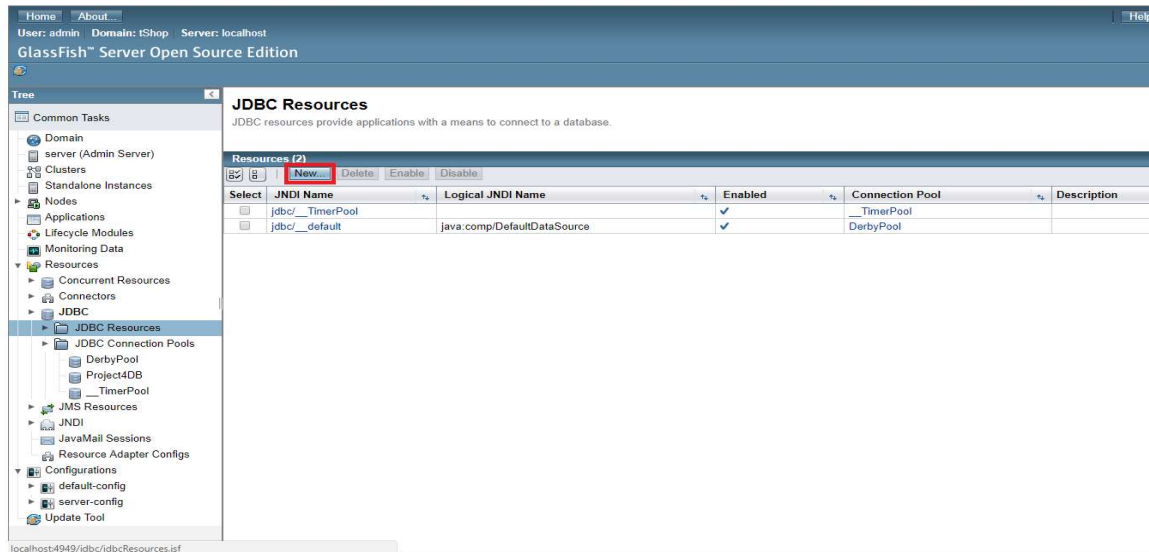
To test the connection pool, you click on Project4DB. In next screen, click on Ping button and you will see “Ping Succeeded”.





## b. Create jdbc resource

Click on JDBC Resources => New

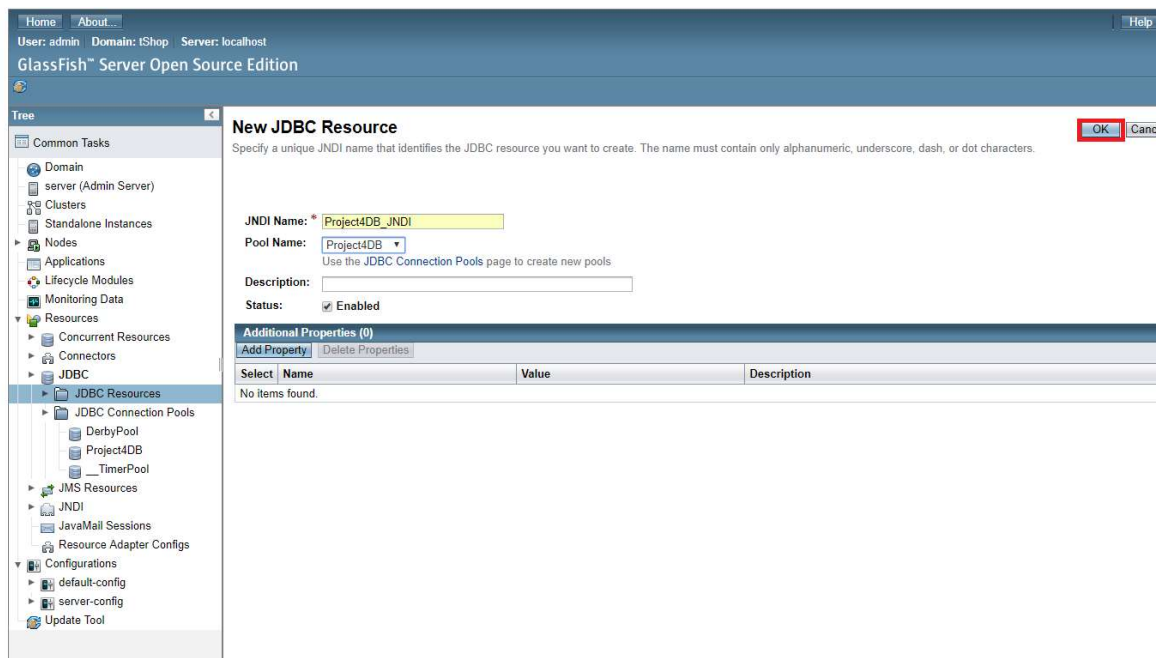


In the next screen, input these fields:

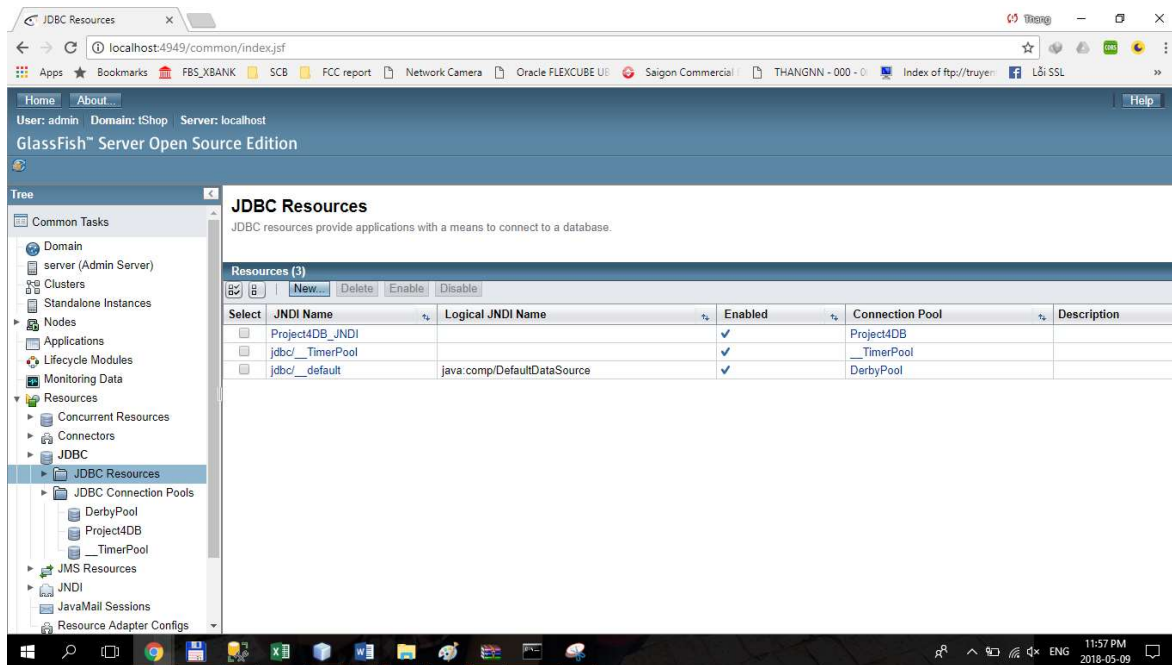
+ JNDI Name: **Project4DB\_JNDI**

+ Pool Name: **Project4DB**

Then clicks on OK button.

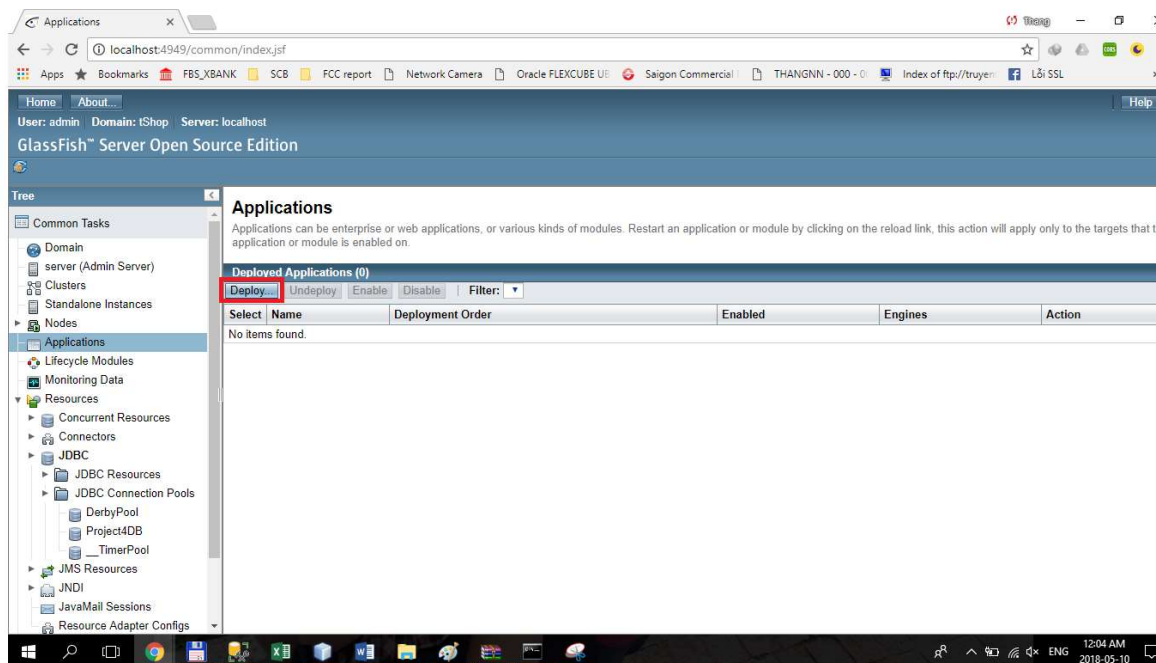


You will be redirected to JDBC Resources screen. Now, new jdbc resource – Project4DB\_JNDI – is created.



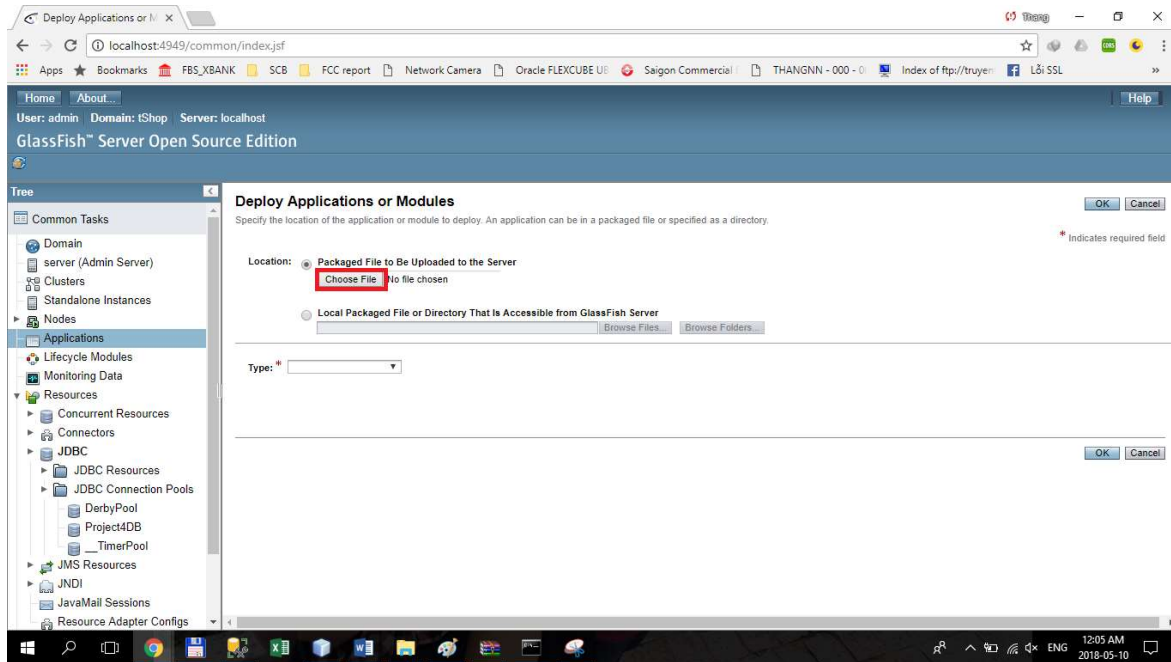
### c. Deploy website

Click on Applications => Deploy button

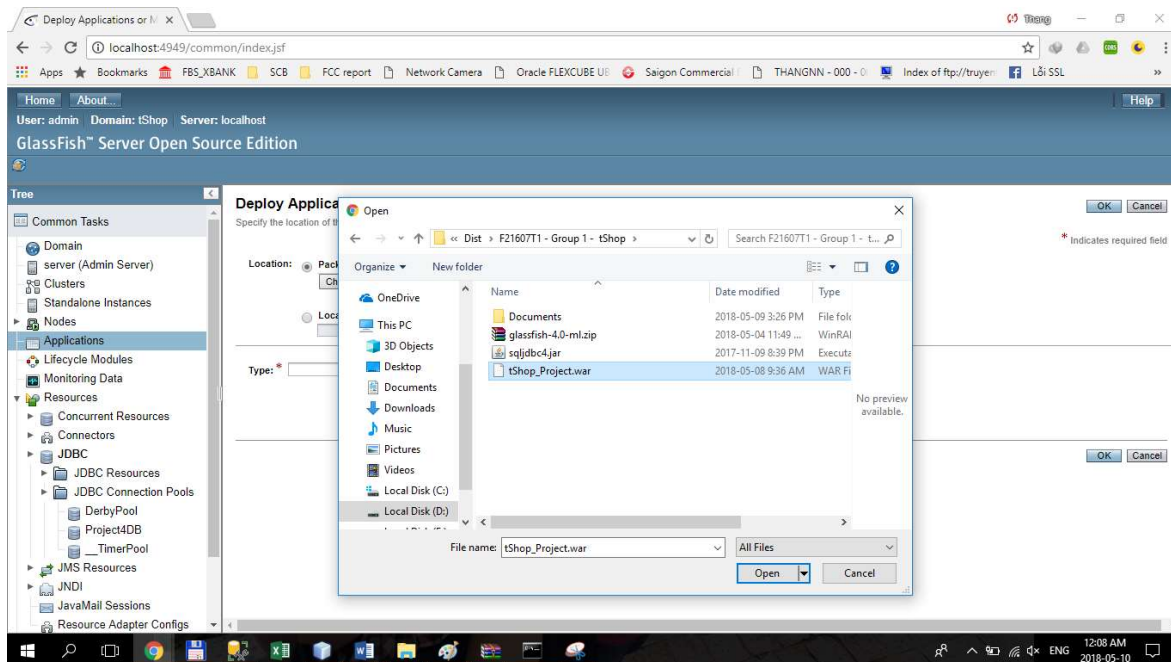




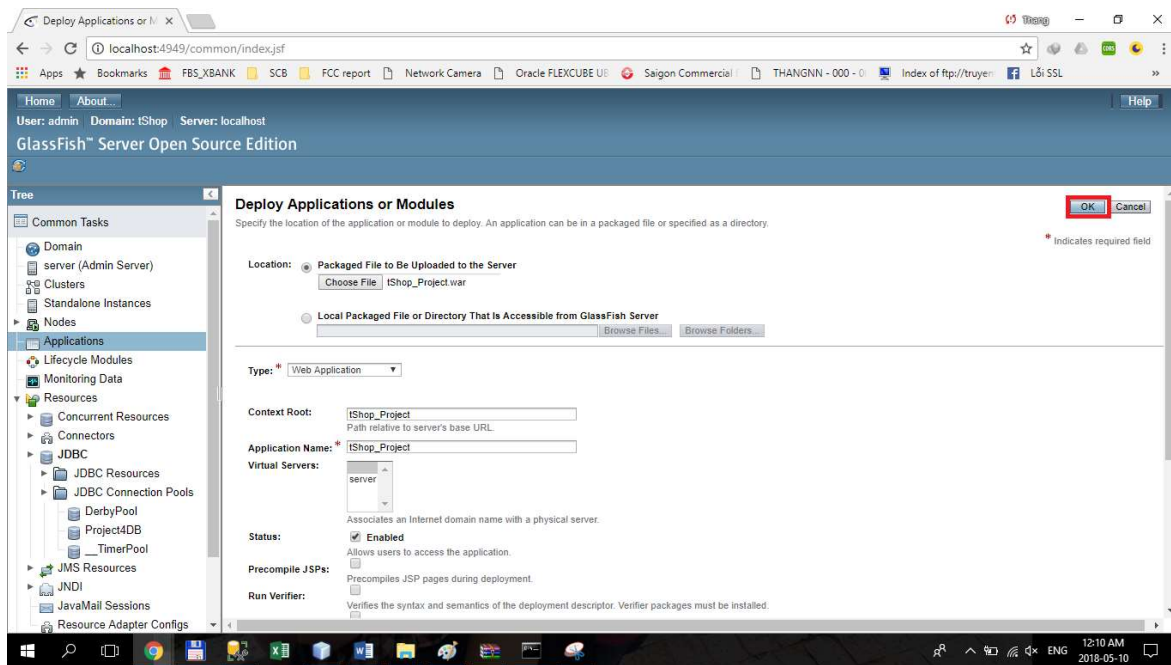
In the next screen, clicks on Choose File button.



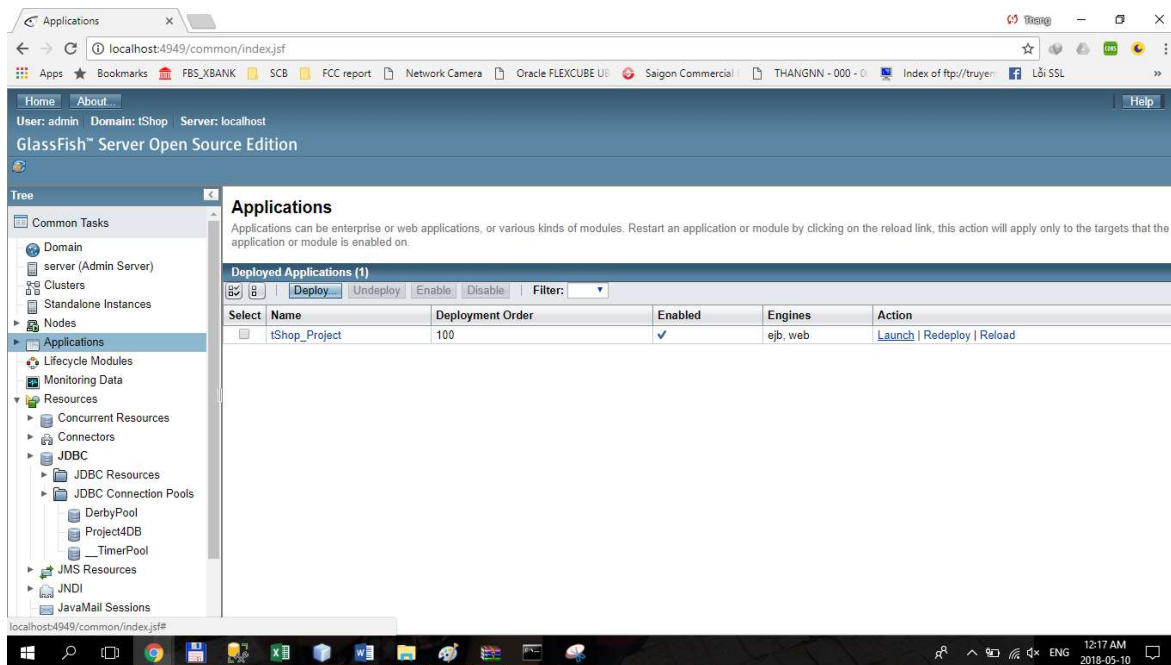
Browse to folder “F21607T1 – Group 1 – tShop” and choose tShop\_Project.war



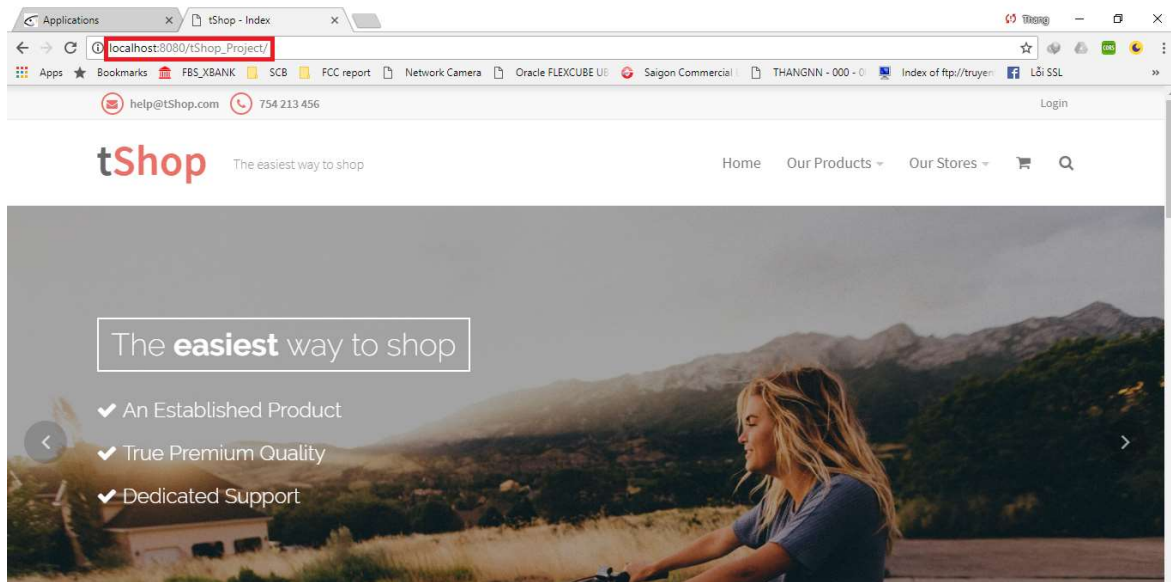
Then clicks on OK button.



Now tShop\_Project is deployed and you will be redirected to Applications screen.



Let open a new browser's window and type the url  
“localhost:8080/tShop\_Project”



**Signature of Team Leader**

**Signature of Supervisor**