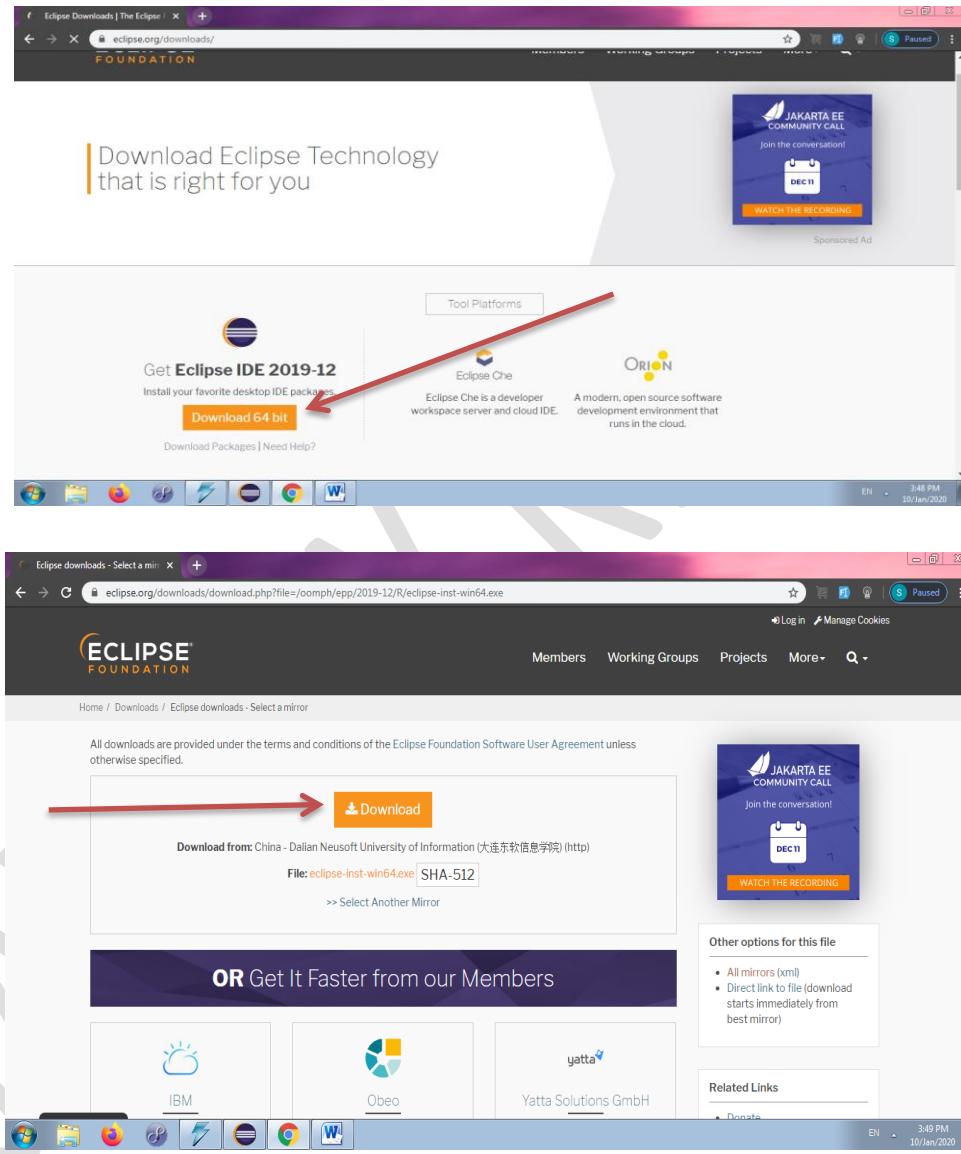


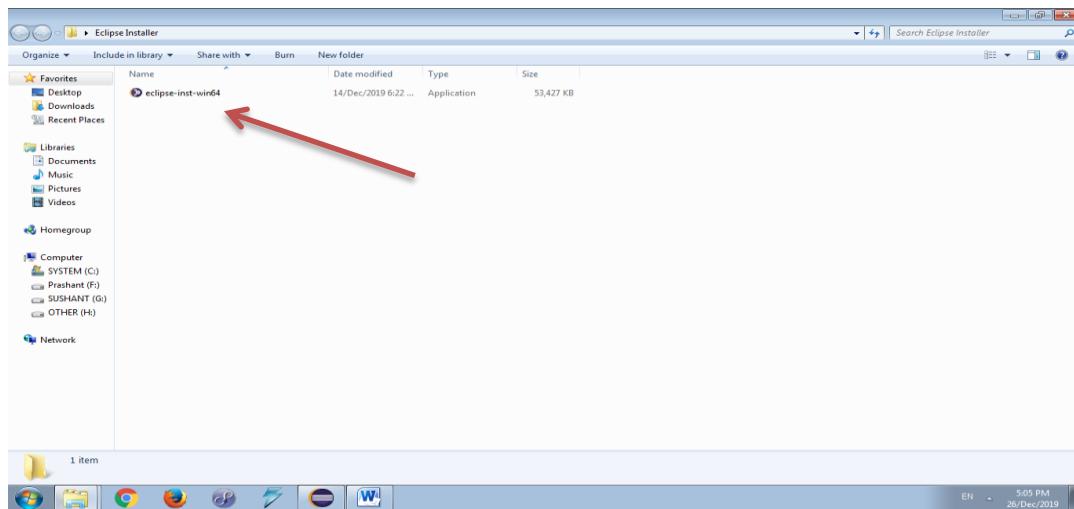
## Hibernate Installation Guide In Eclipse

### Step 1>

- DOWNLOAD Eclipse IDE 2019-09 → <https://www.eclipse.org/downloads/>
- **If you have already Eclipse IDE, Don't Install this IDE.**

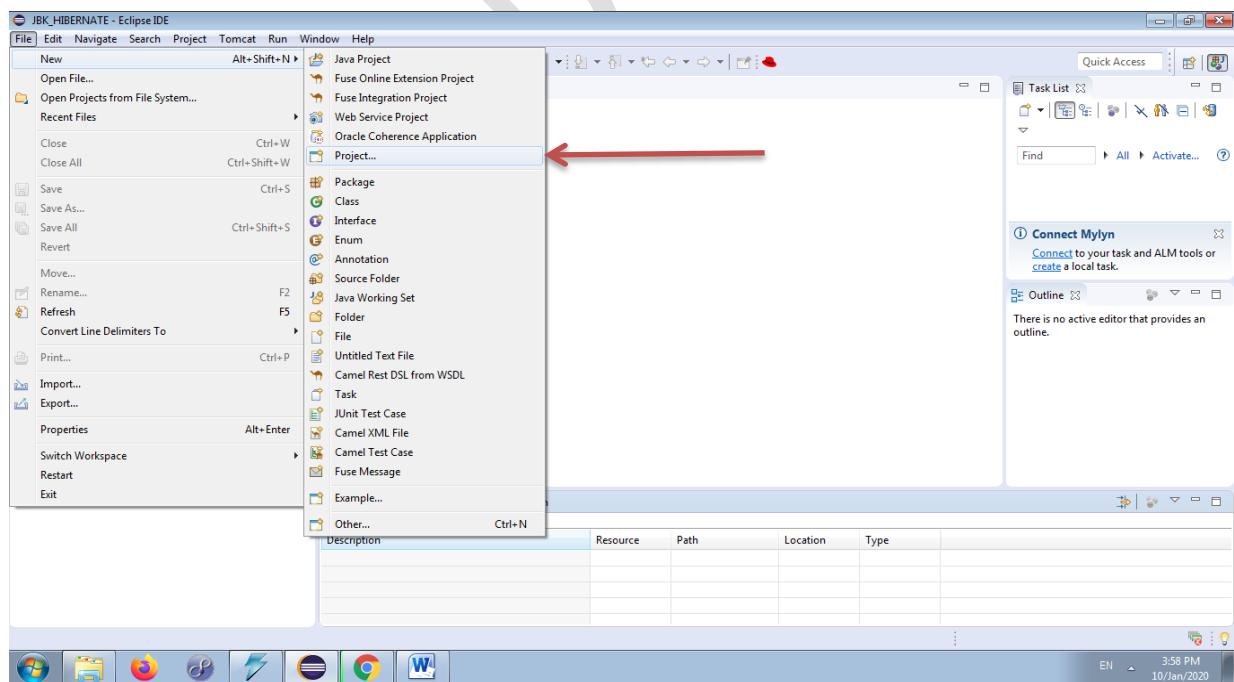


- Install Eclipse IDE (Version: 2019-09 R (4.13.0)).

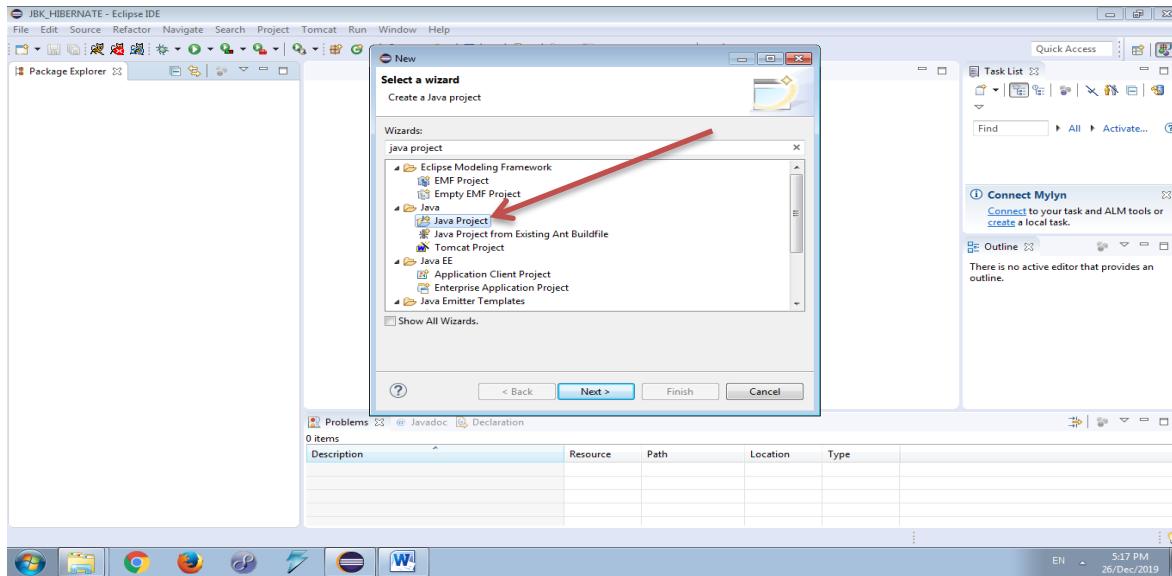


## Step 2>

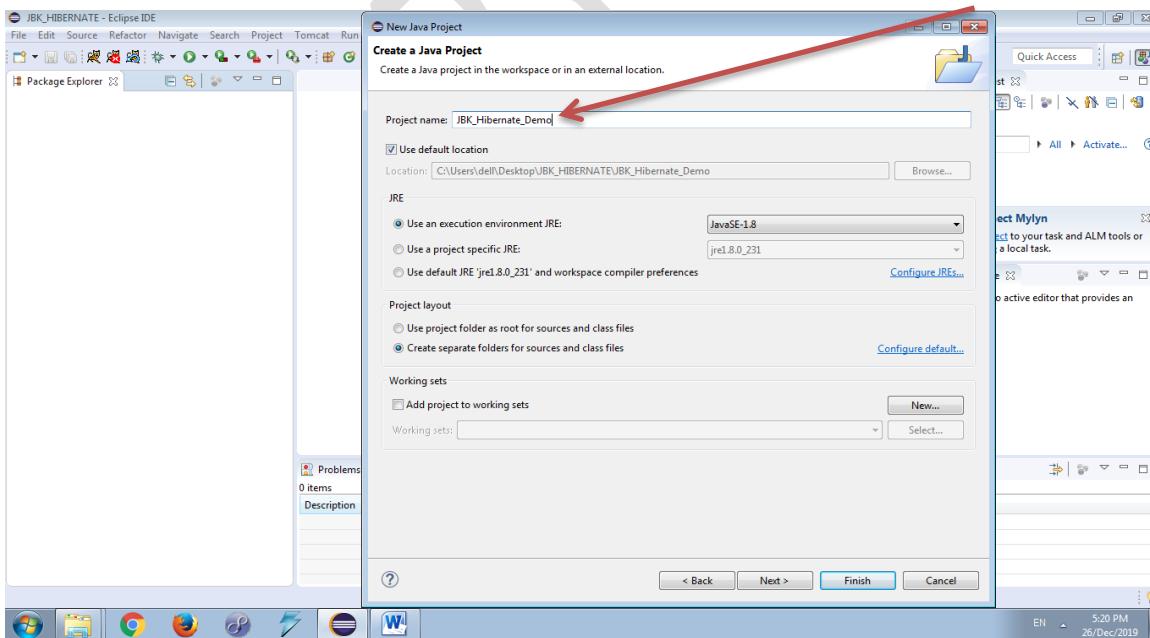
Create Java Project:-File → New → Project



## ➤ Select Java Project



## ➤ Click On Next → Write Project Name



**Step 3>**

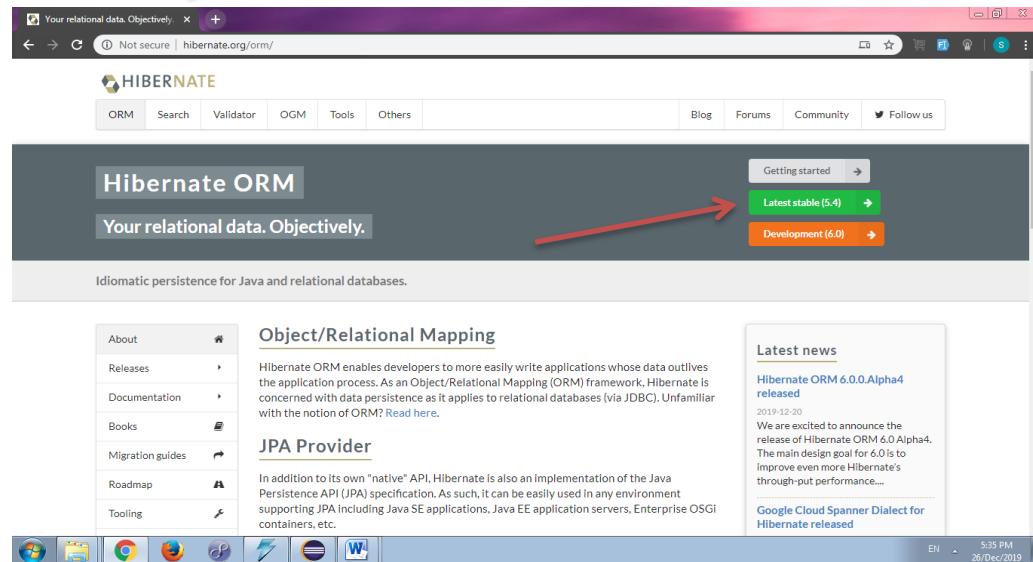
- **Create Database and Table in MYSQL.**
- **Here Name of Schema is → jbk\_hibernate\_demo**
- **You need to create this Schema prior to create below table**
- **Name Of the table is → profile**

```
CREATE TABLE `jbk_hibernate_demo`.`profile` (
`profileID` int(11) NOT NULL,
`firstname` char(15) default NULL,
`lastname` char(15) default NULL,
`email` char(45) default NULL,
`phone` char(15) default NULL,
`cctc` double default NULL,
`nperiod` int(11) default NULL,
PRIMARY KEY (`profileID`),
UNIQUE KEY `PRIMARY_KEY` (`profileID`)
);
```

```
create unique index ` PRIMARY_KEY` on `jbk_hibernate_demo`.`profile`(`profileID`);
```

**Step 4>****➤ Download Hibernate Jars.**

- i. Go to Url → <http://hibernate.org/orm/> → Click On Latest Stable 5.4

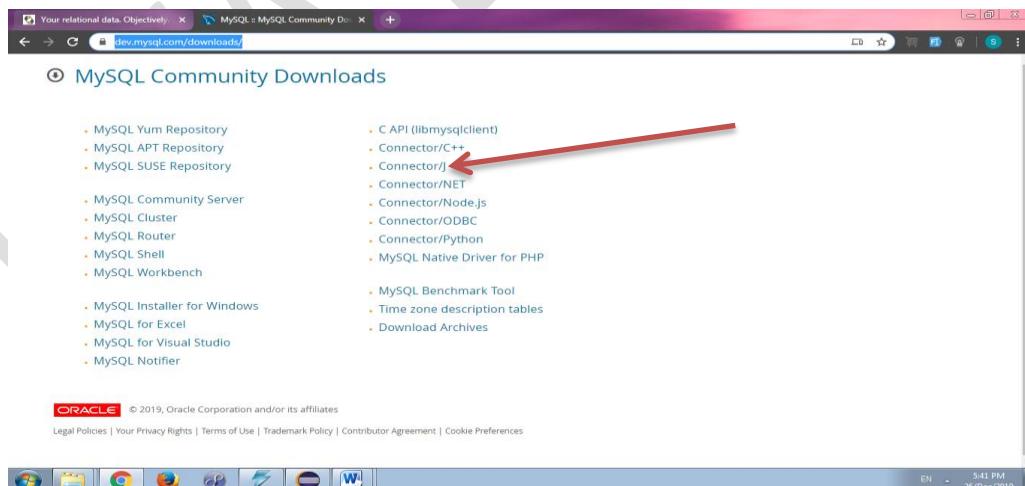


- ii. Extract the Downloaded Folder.

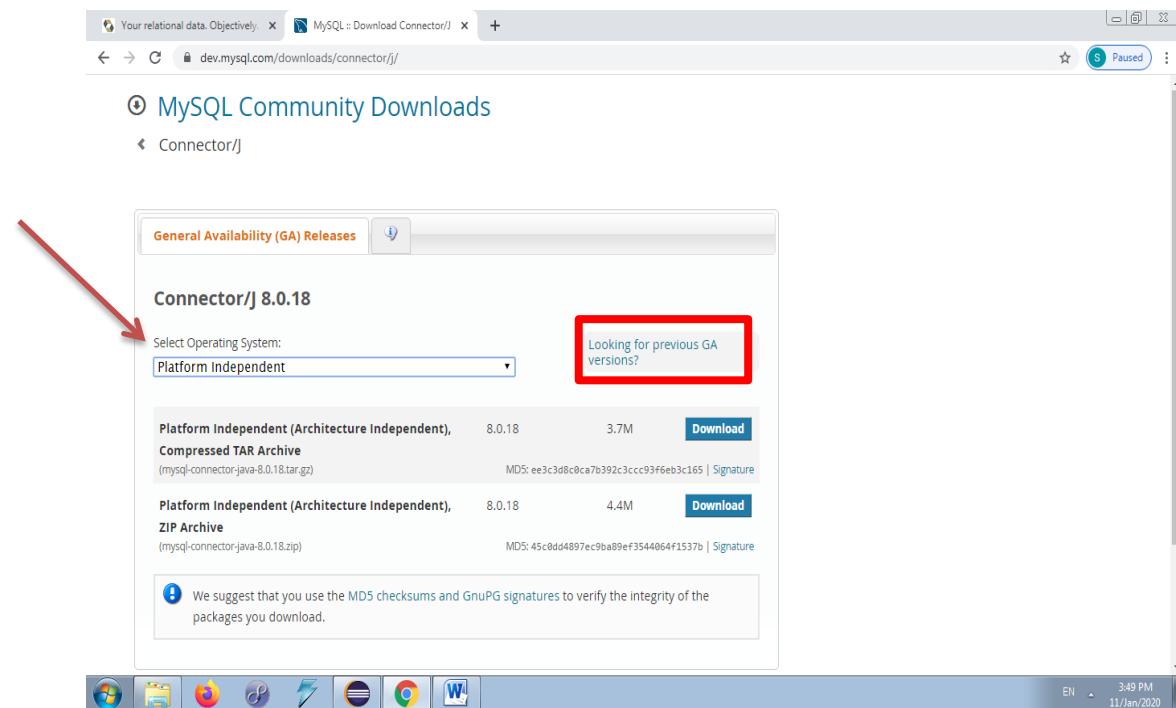
- Jars will be contained in folder :- lib → required

**➤ Download MYSQL Connector Jars:-**

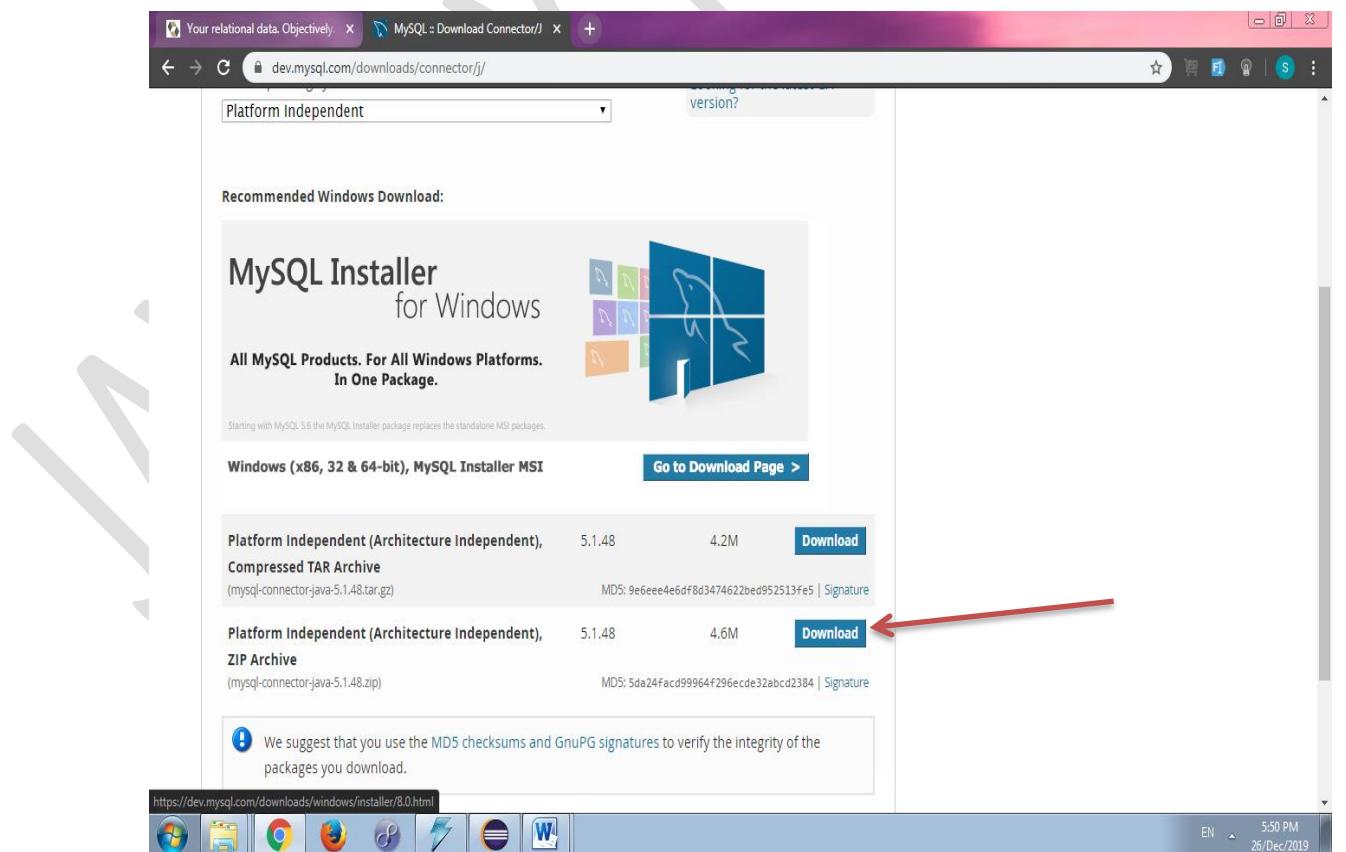
- i. <https://dev.mysql.com/downloads/> → Connector/J



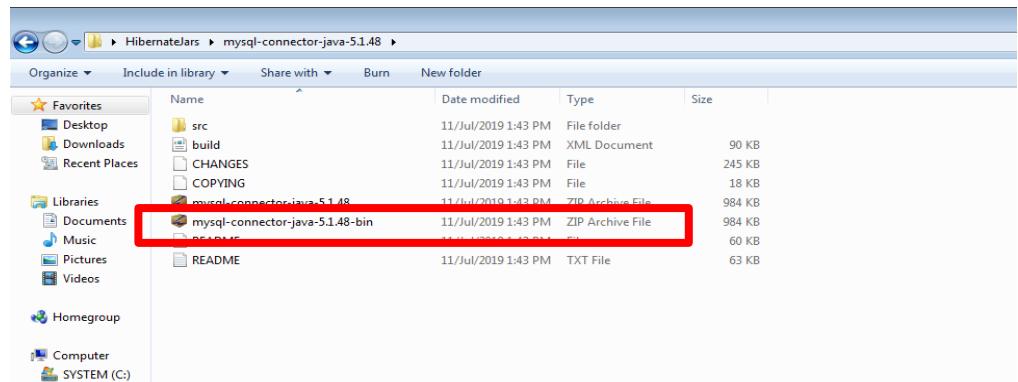
- II. Select Operating System as → Platform Independent  
 III. If it is showing version (8.0.18) then click on → Looking for previous GA versions?



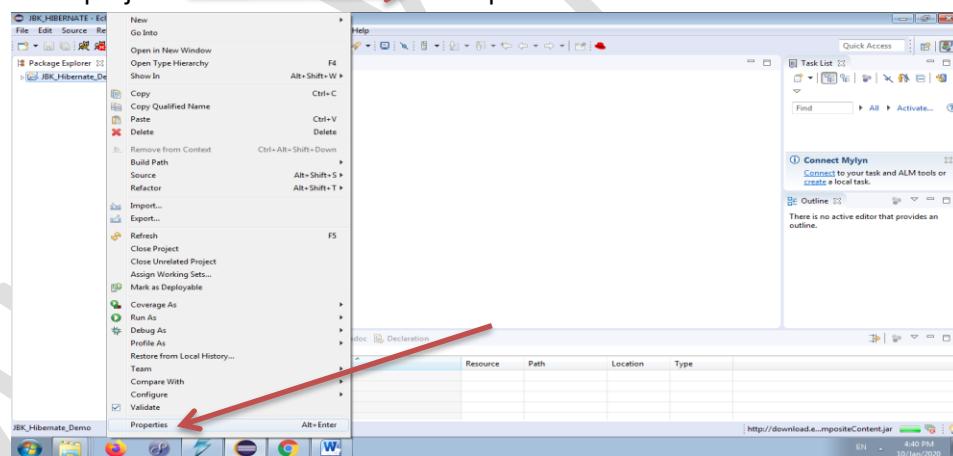
#### IV. Platform Independent Zip Archive (5.1.48)



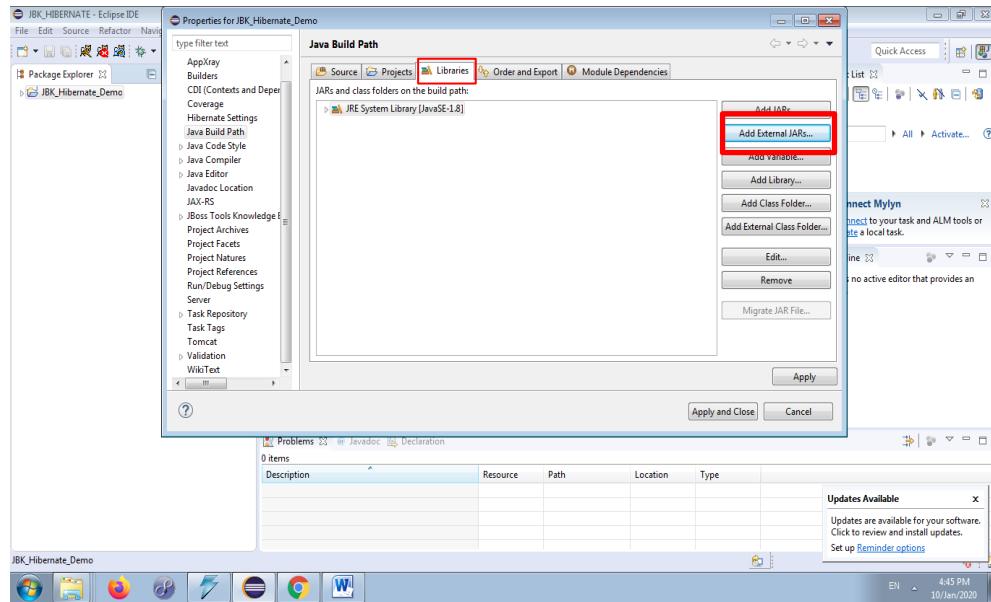
## V. Extract Downloaded folder to get MYSQL Connector jars as below.

**Step 5>**

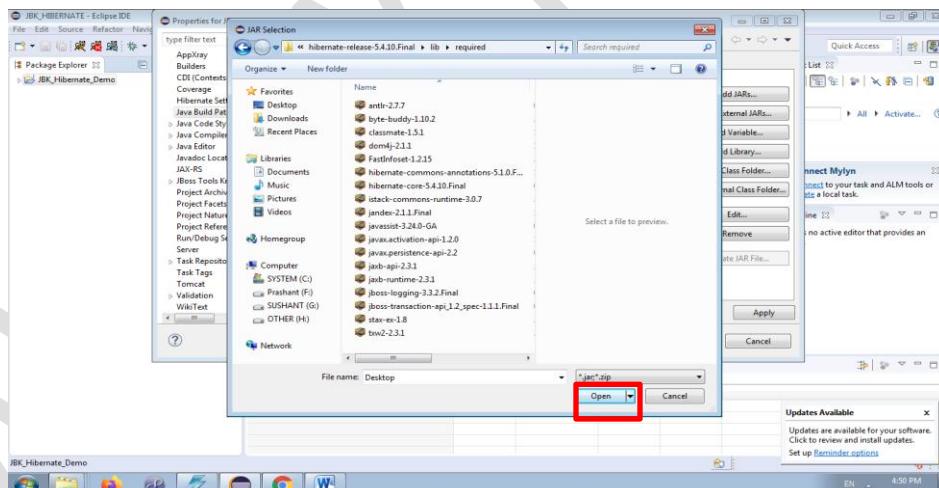
- Add all jars in our Java project.
- Steps for adding Jars.
- Write Click on project  Properties



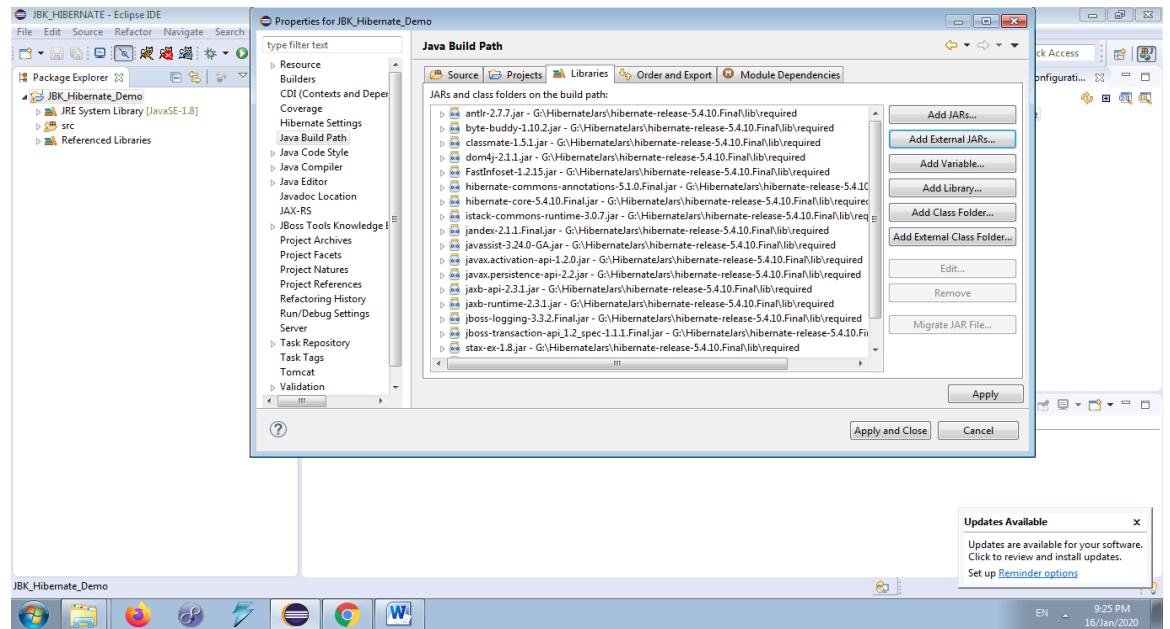
- Go to Libraries And Click on Add External JARs



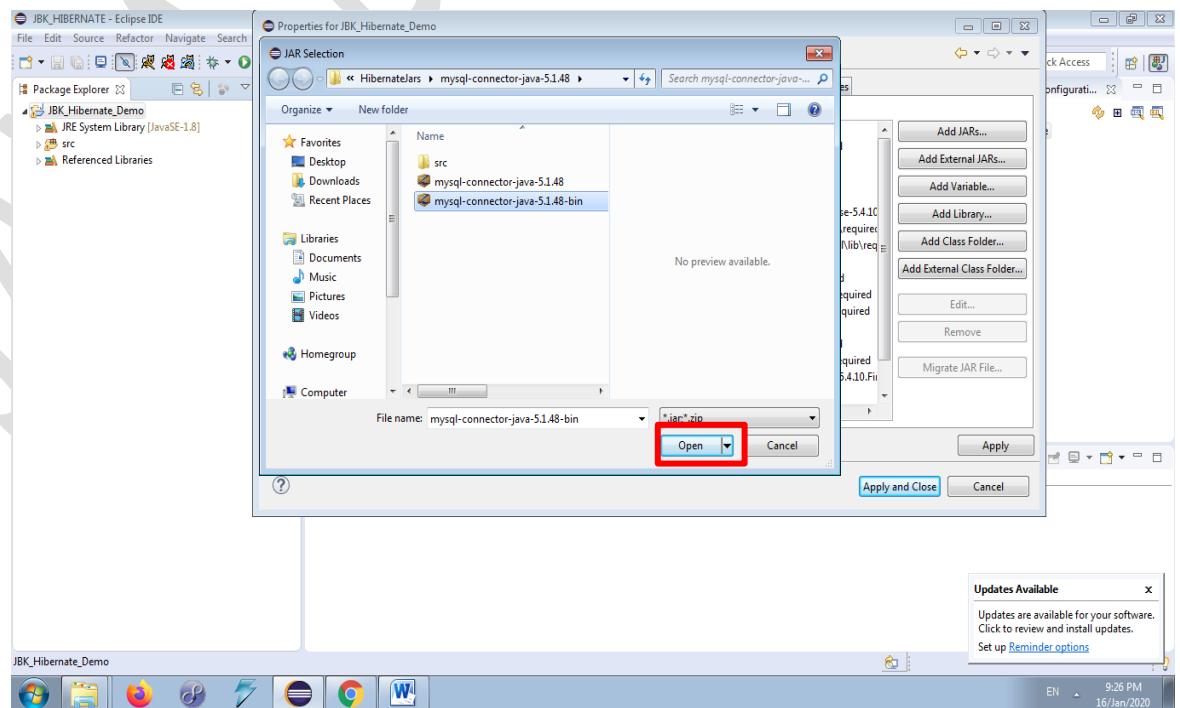
- Select all jars → Click On Open



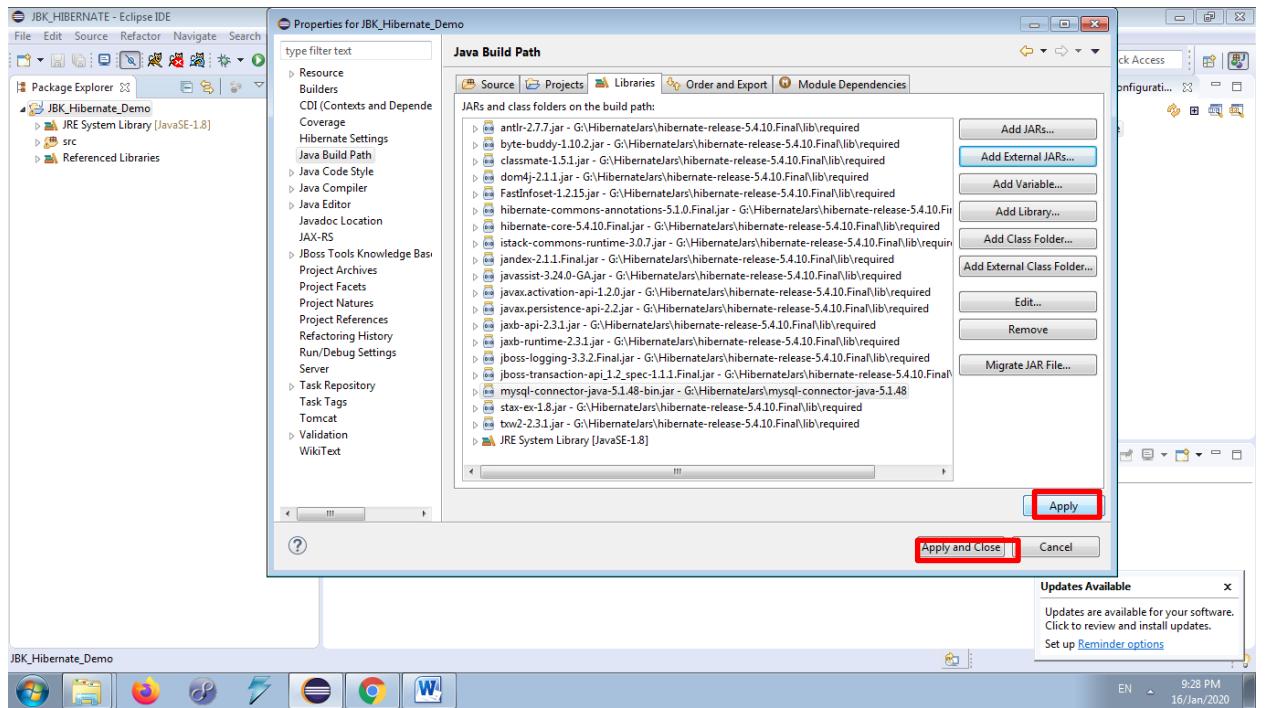
- Add MYSQL Jar
- Again Click On add External Jars → To add MYSQL jar



- Select MYSQL Jar.
- Click on Open.

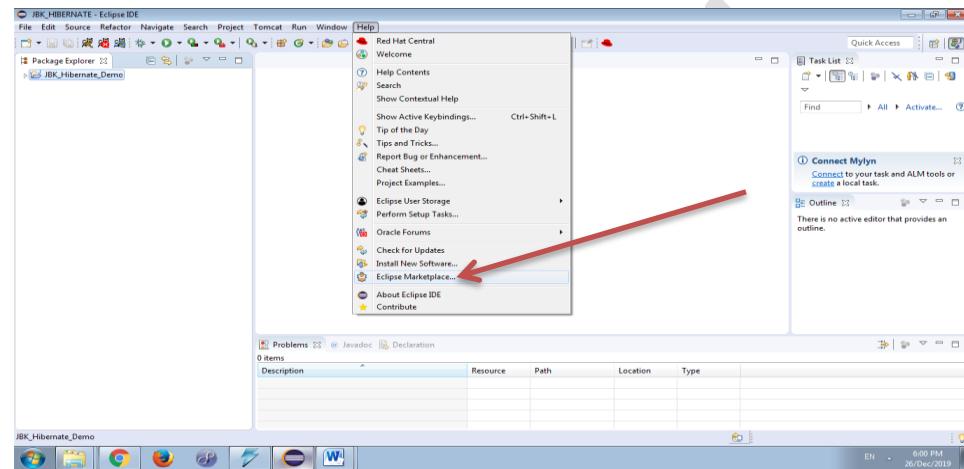


➤ Click On Apply ➔ Apply and Close.

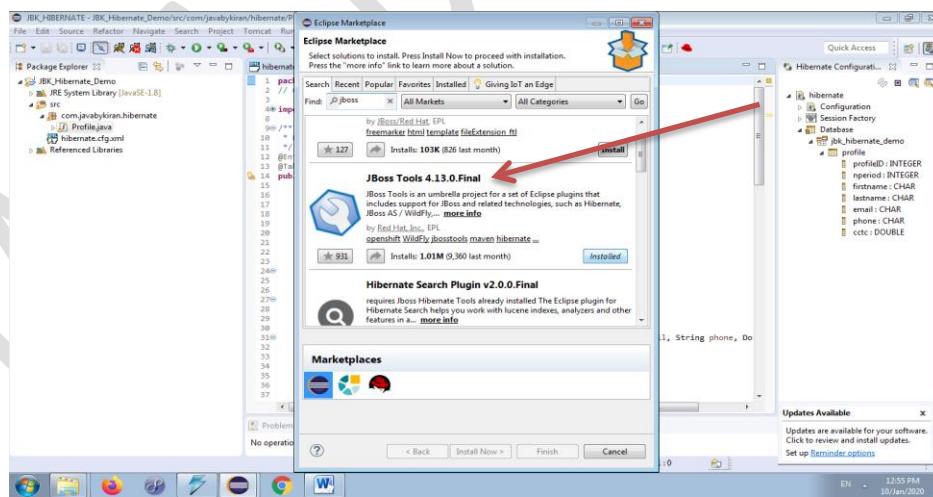


**Step 6>**

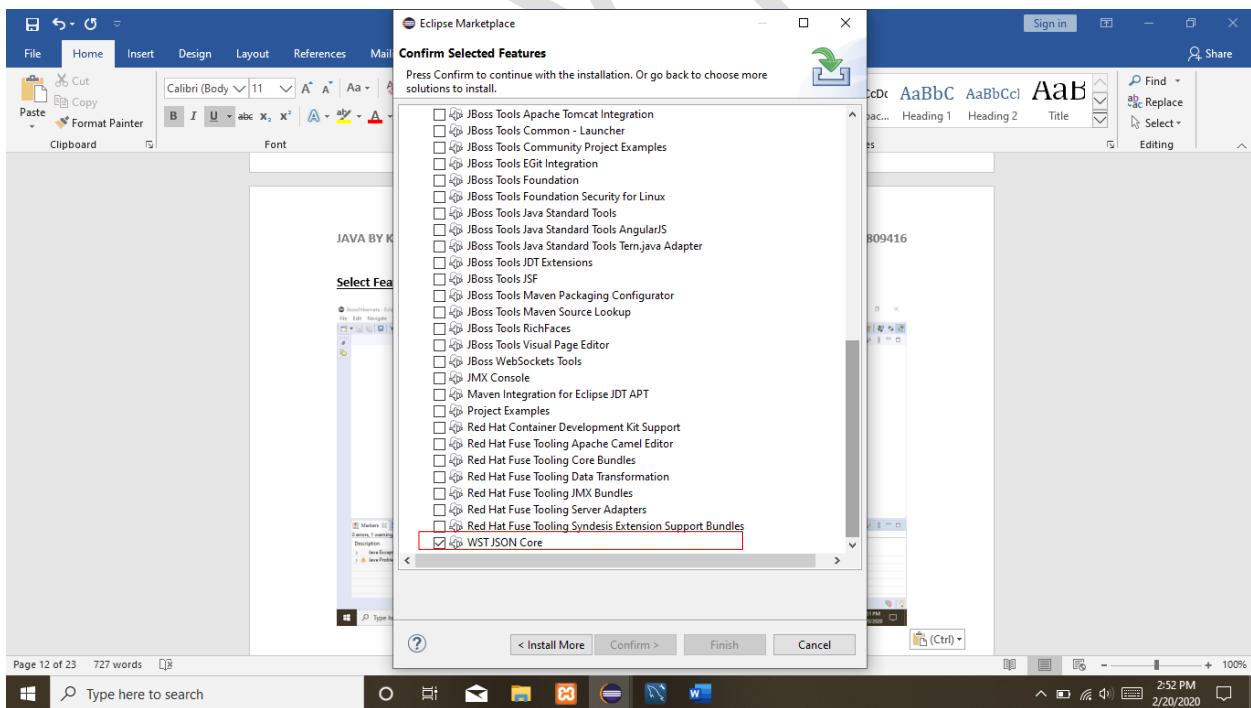
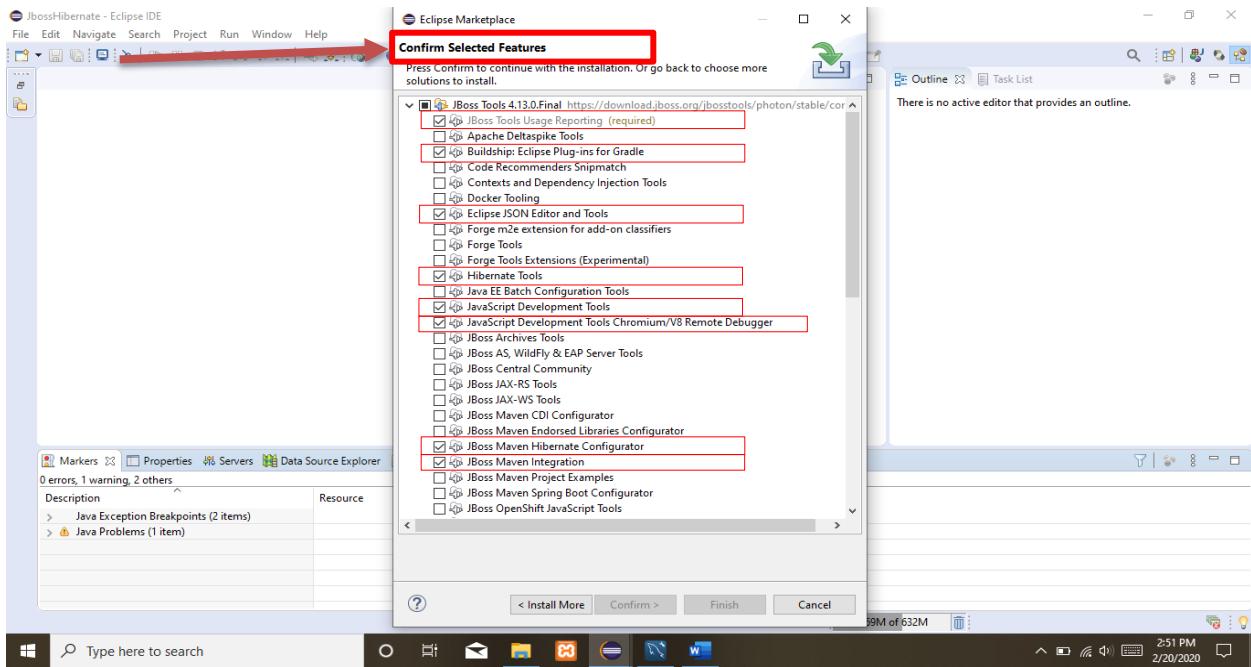
- i. Download JBoss Tools 4.13.0 Final (This version will show in eclipse 2019-09) From Eclipse MarketPlace.
- ii. For Other Eclipse IDEs you can download as shown in your eclipse marketplace.
- iii. In Eclipse IDE Go to → Help → Marketplace( For this step your system must be connected to Internet).



- iv. Install JBoss Tools 4.13.0 Final (You have to click on Install Button).



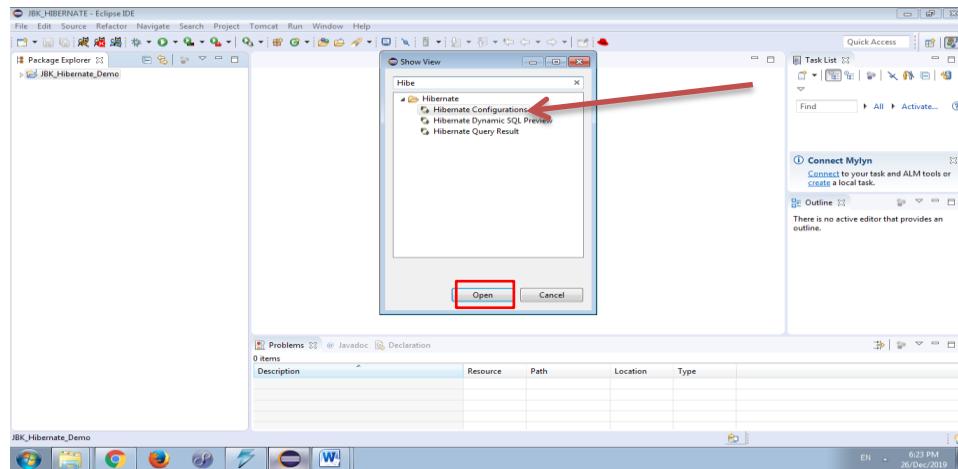
➤ **Select Features in JBoss as per following image:**



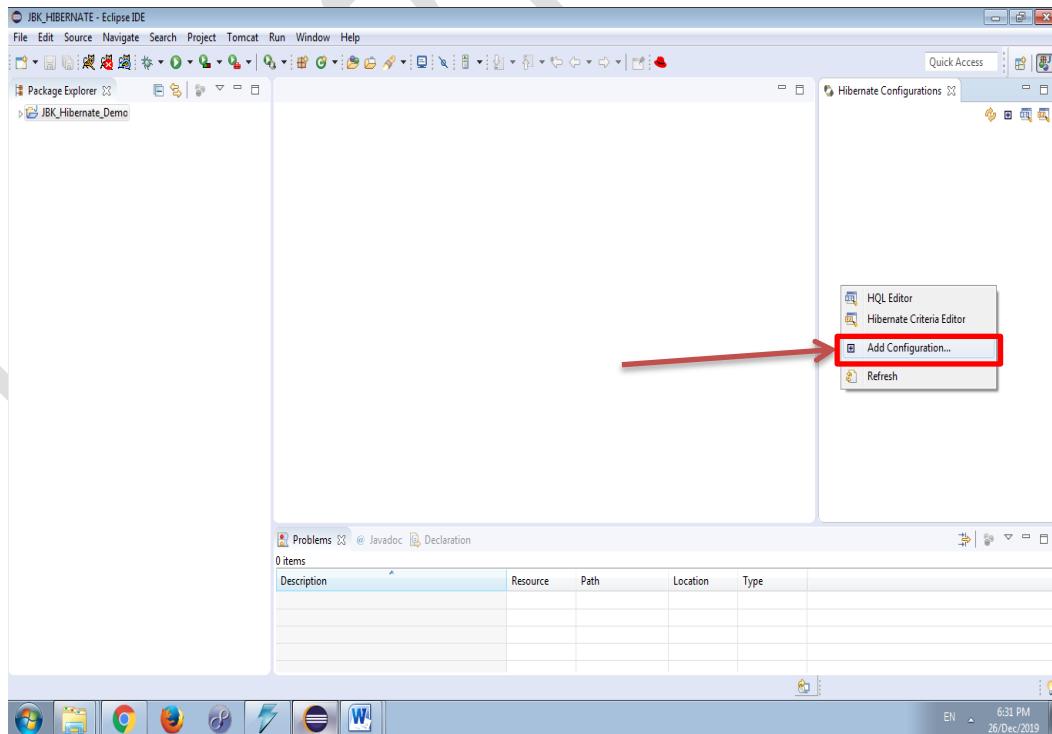
**Step 7>**

➤ For Hibernate Configuration

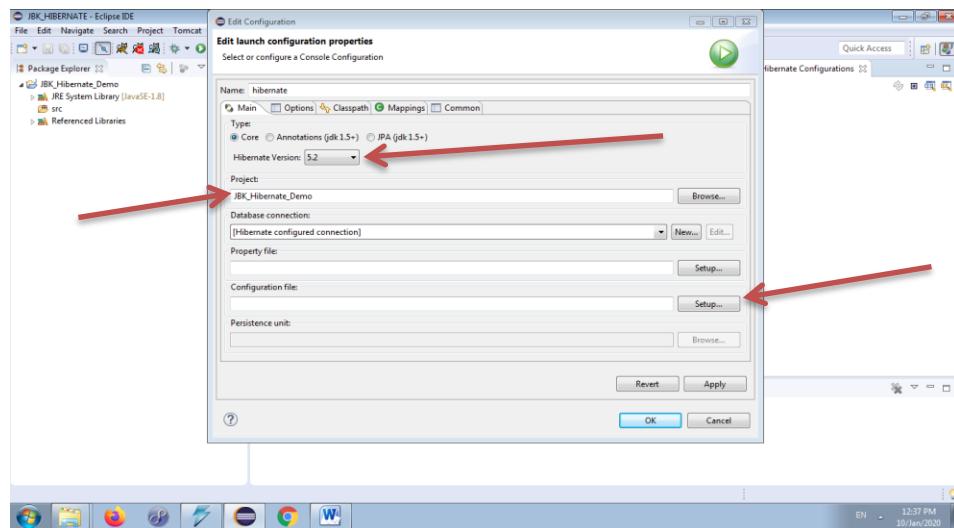
- i. Window → Show View → (Search)Hibernate → Hibernate Configuration → Click On Open



- ii. Hibernate Configuration → Right Click → Add Configuration.

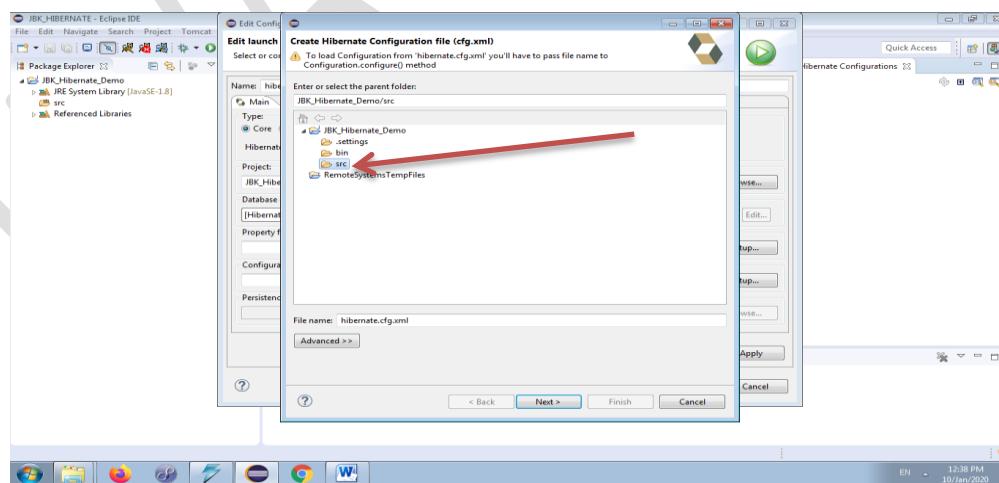


- iii. Fill the all details in Edit configuration window like:-
- Name (Don't change the name)
  - Hibernate Version 5.2
  - Select the project
  - Setup The Configuration file(Click On Setup)

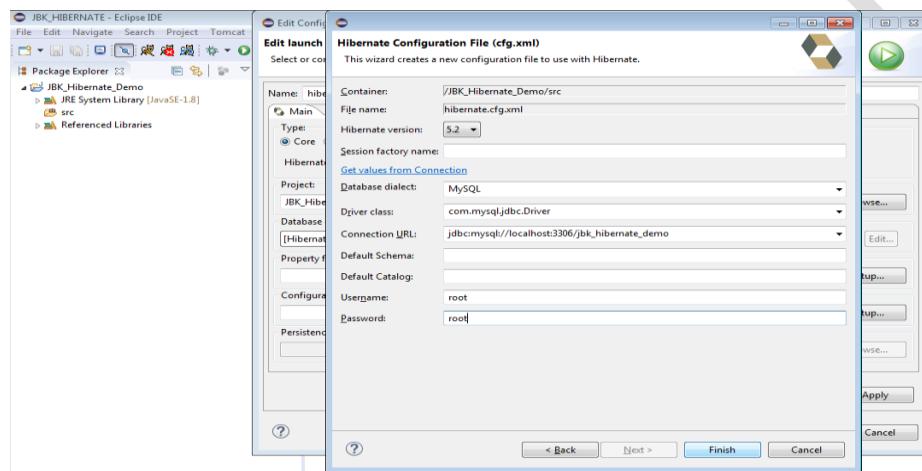


- iv. Setup Configuration File(For creating hibernate.cfg.xml file):-

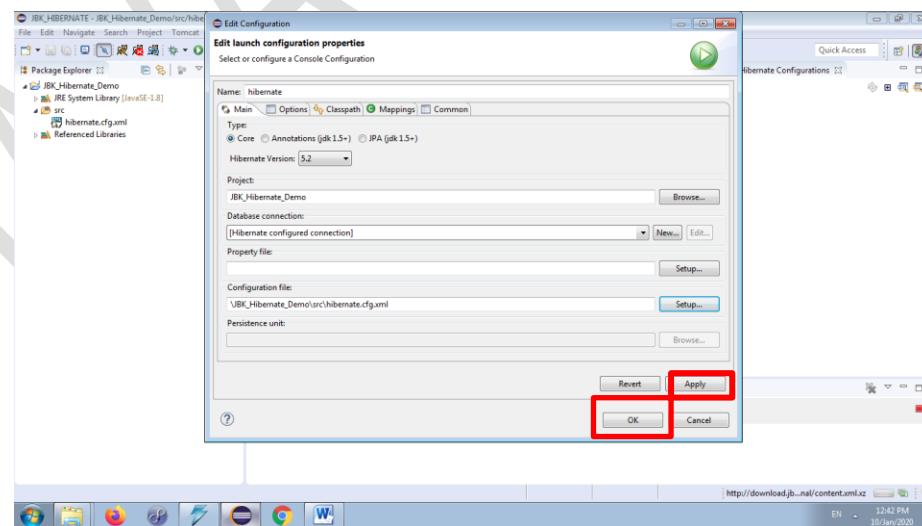
➤ Select the src folder of your project and click on next.



- Select Hibernate Version 5.2
- Select Database dialect (**MYSQL**)
- Select Driver class (com.mysql.jdbc.driver)
- Give connection URL to connect your database.
- Provide Username and Password.
- Click on Finish.



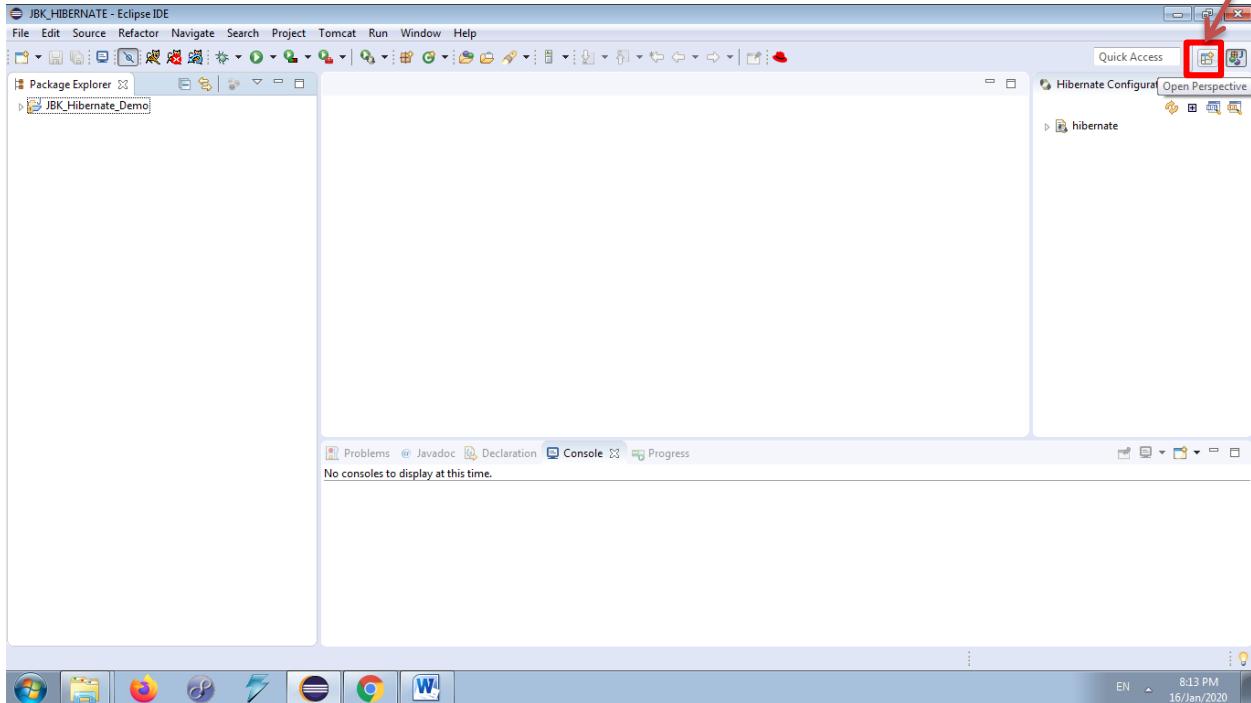
- After completion of setup hibernate configuration file you will again redirected to edit configuration window.



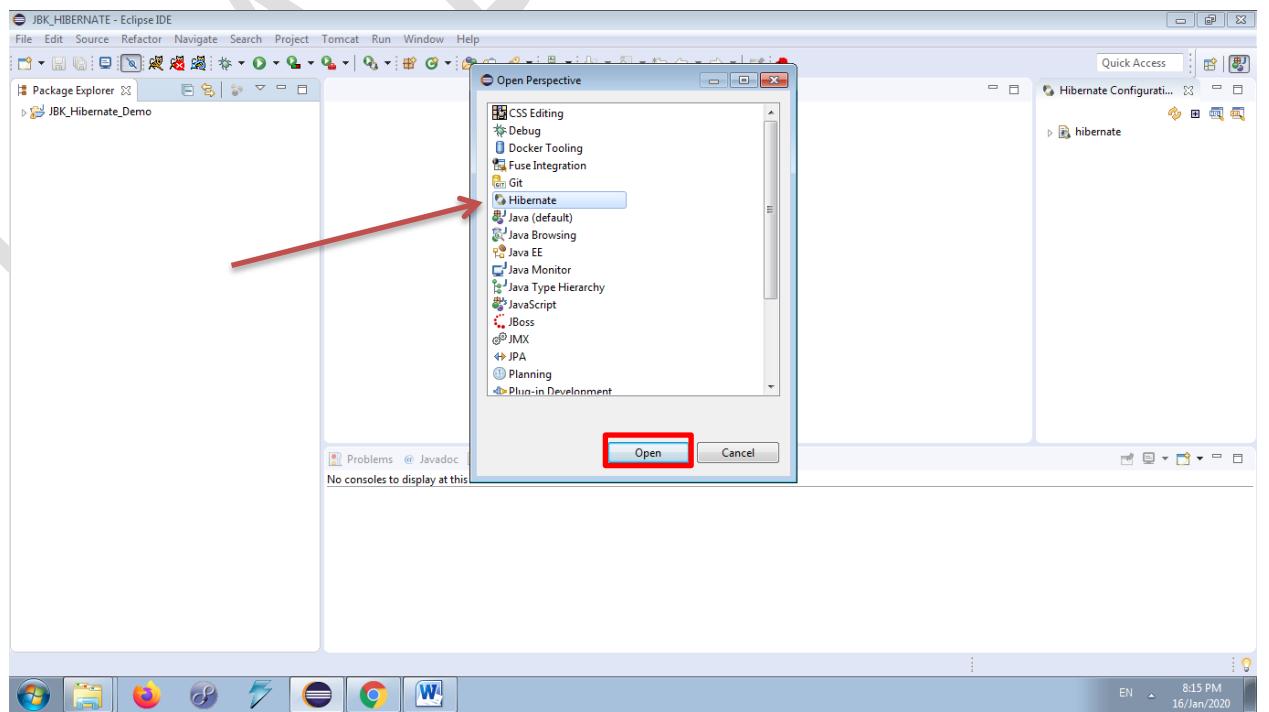
- Click On Apply
- Click On OK

**Step 8>**

- **Open Perspective (For Changing Perspective to the Hibernate Perspective).**

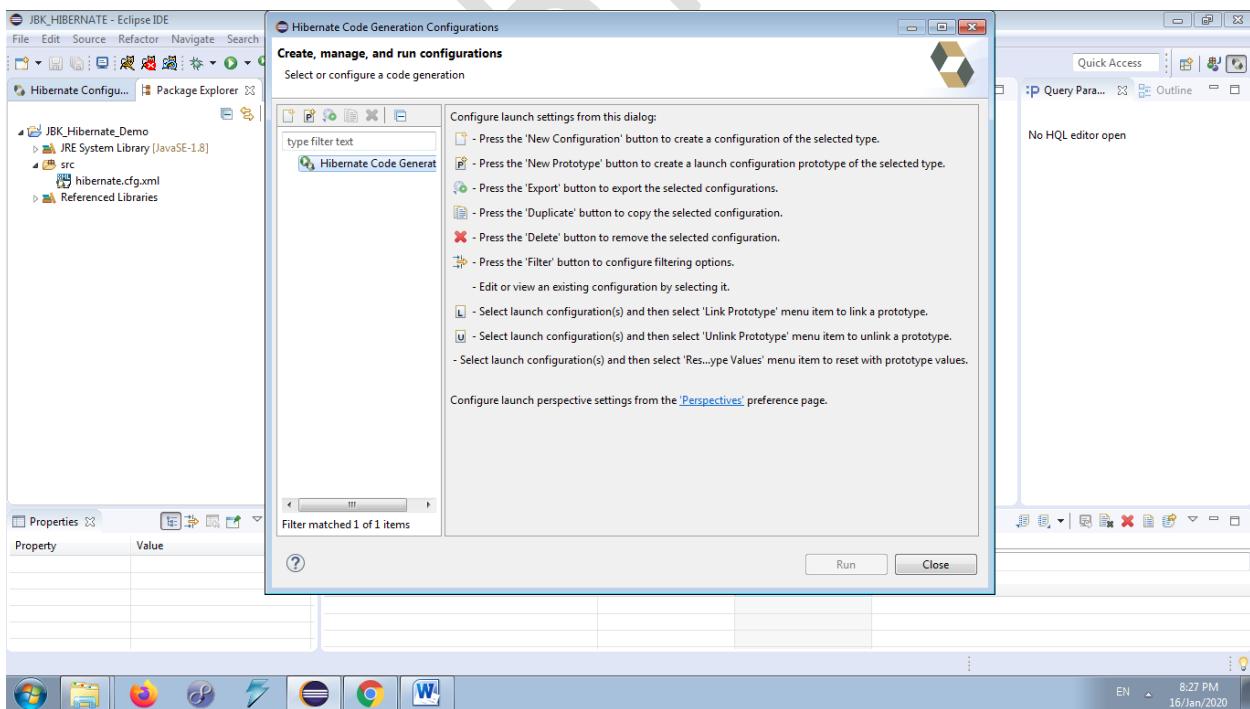
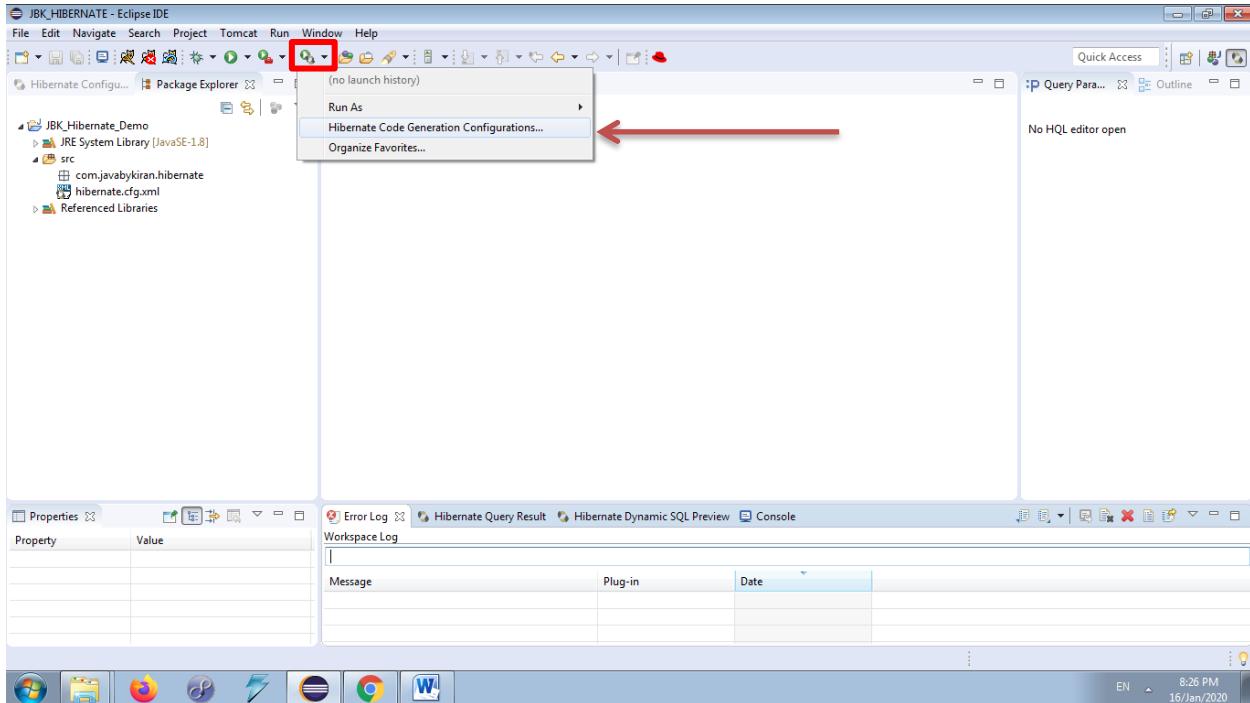


- **Hibernate** → **Open**

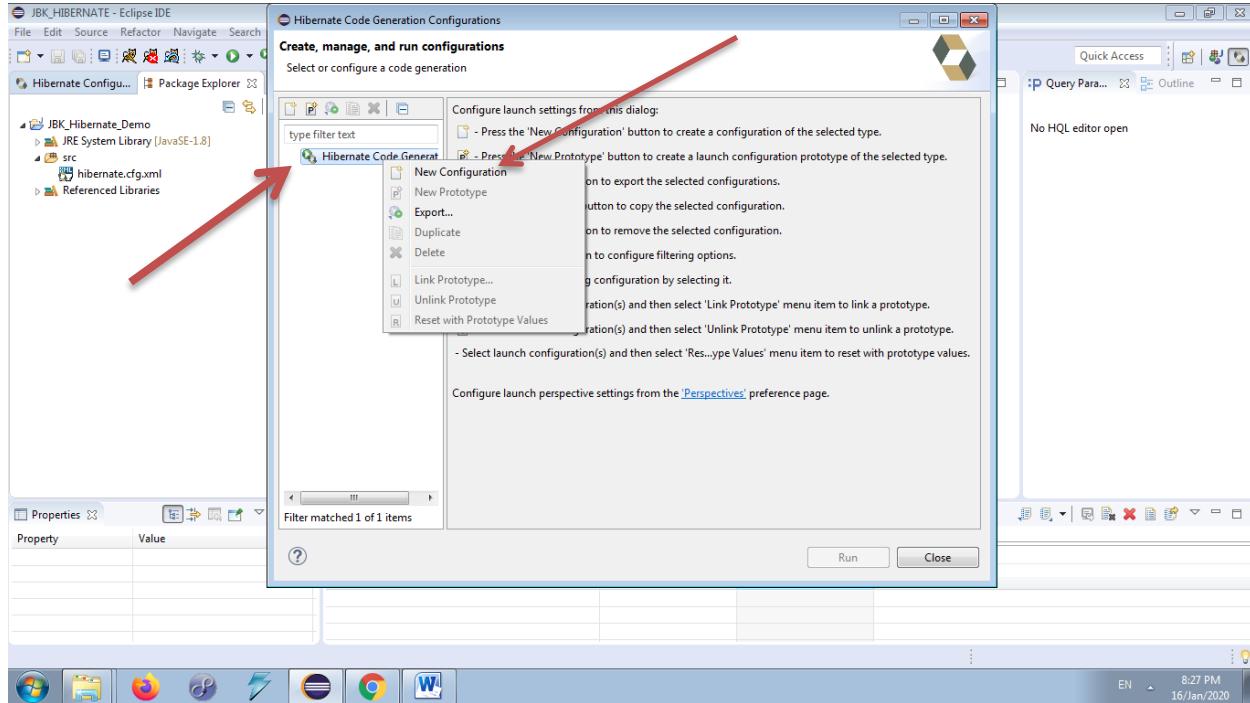


**Step 9>**

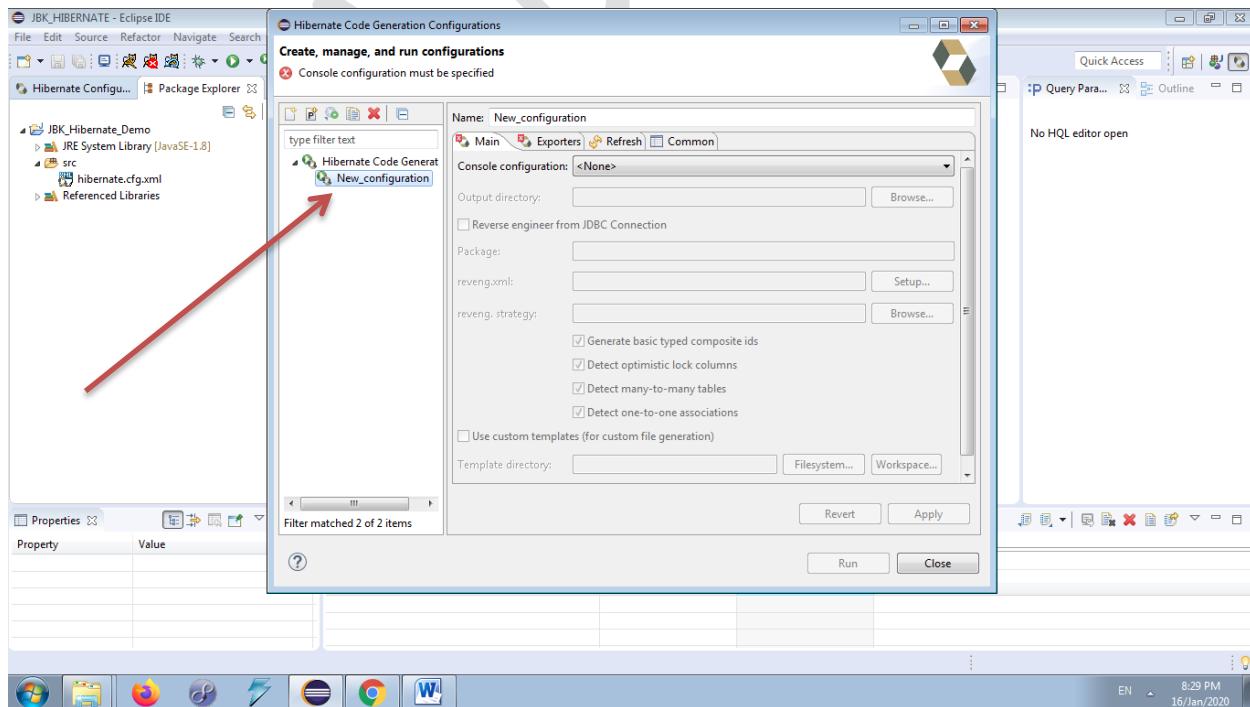
- Click On Hibernate Code Generation Configuration



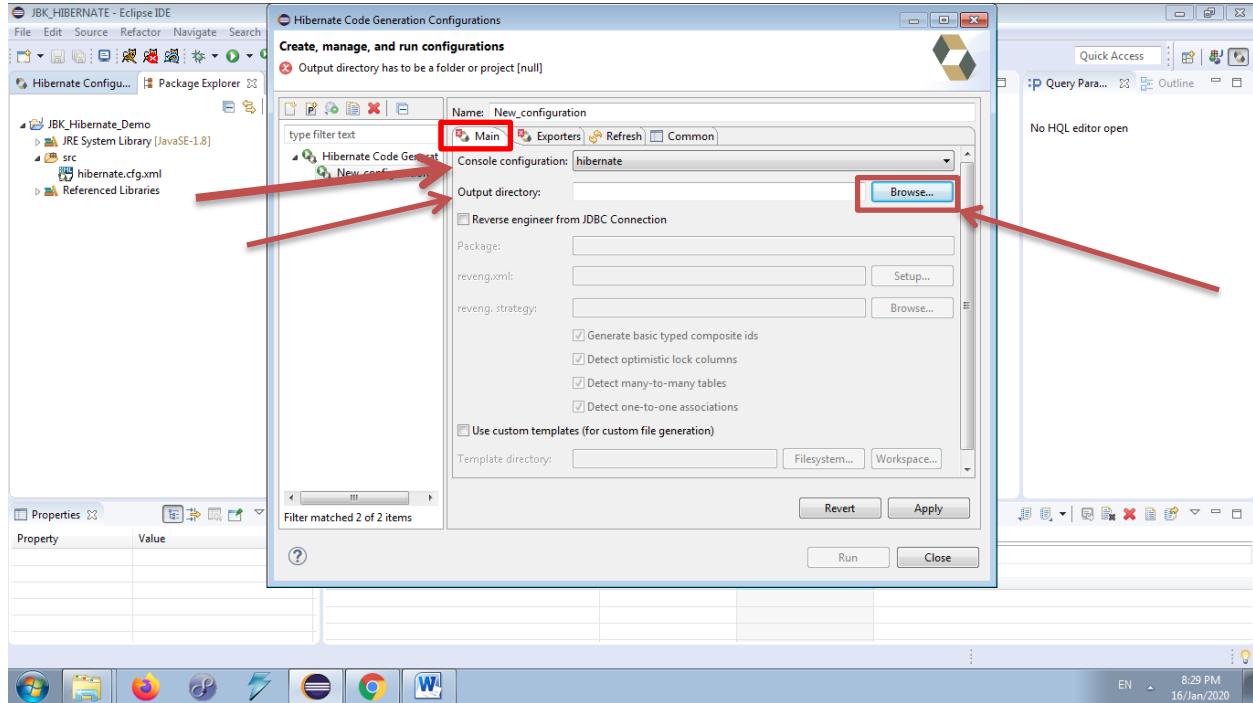
- Right Click On  Hibernate Code generation Configuration.
- Select  New Configuration (No need to do this for every project, use the same configuration by changing console configuration and output directory for further projects)



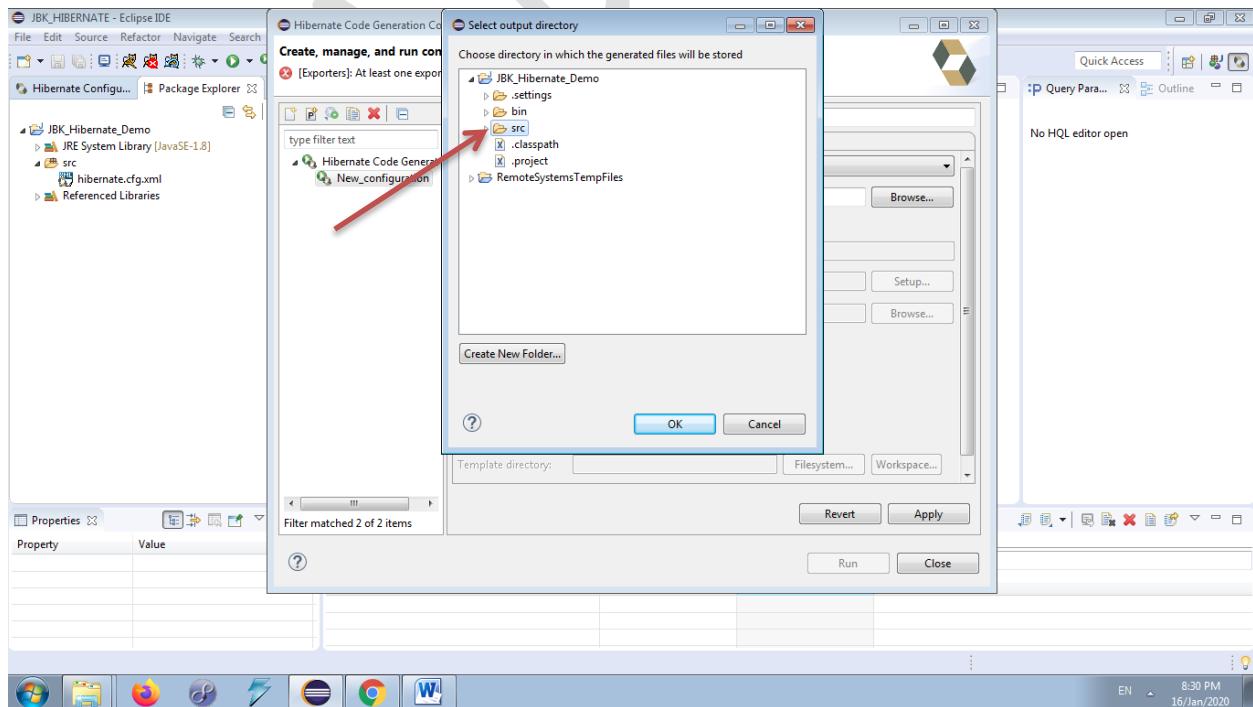
- Here You can see New\_configuration



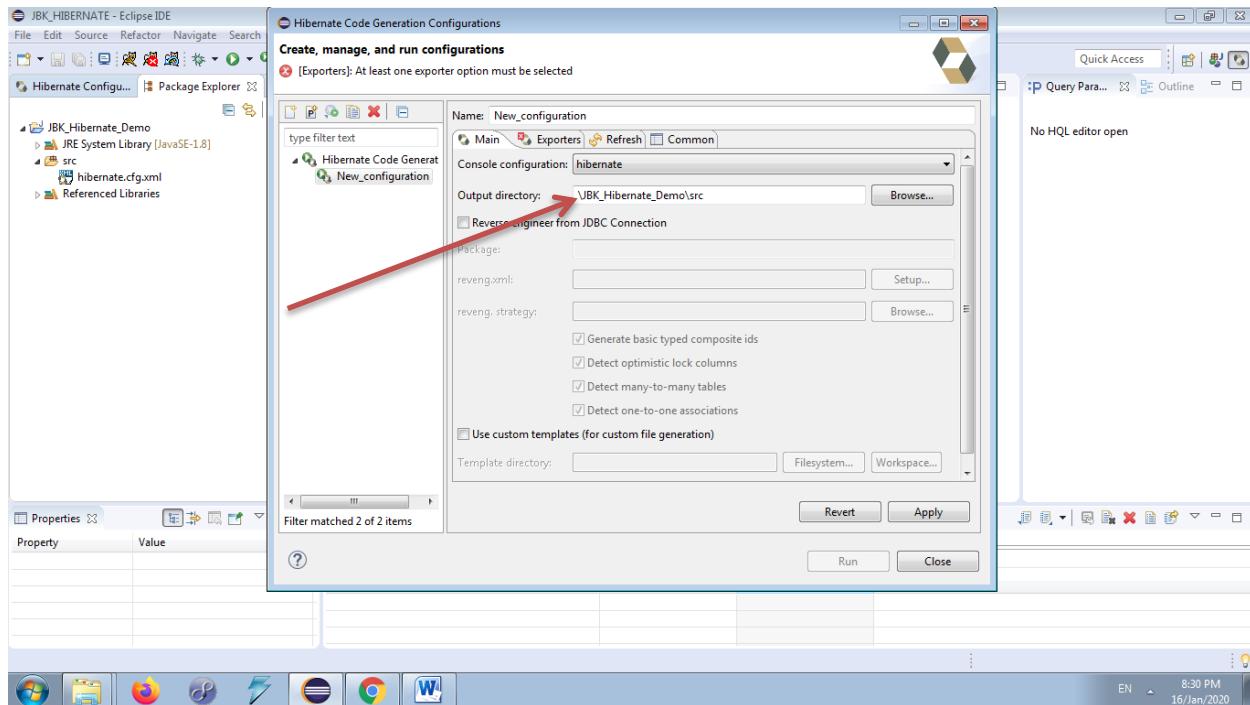
- New Configuration → Fill All The Details
- In Main tab
- Console Configuration (Select Name of the configuration that we have created).
- Click on → Browse (For selection output directory).



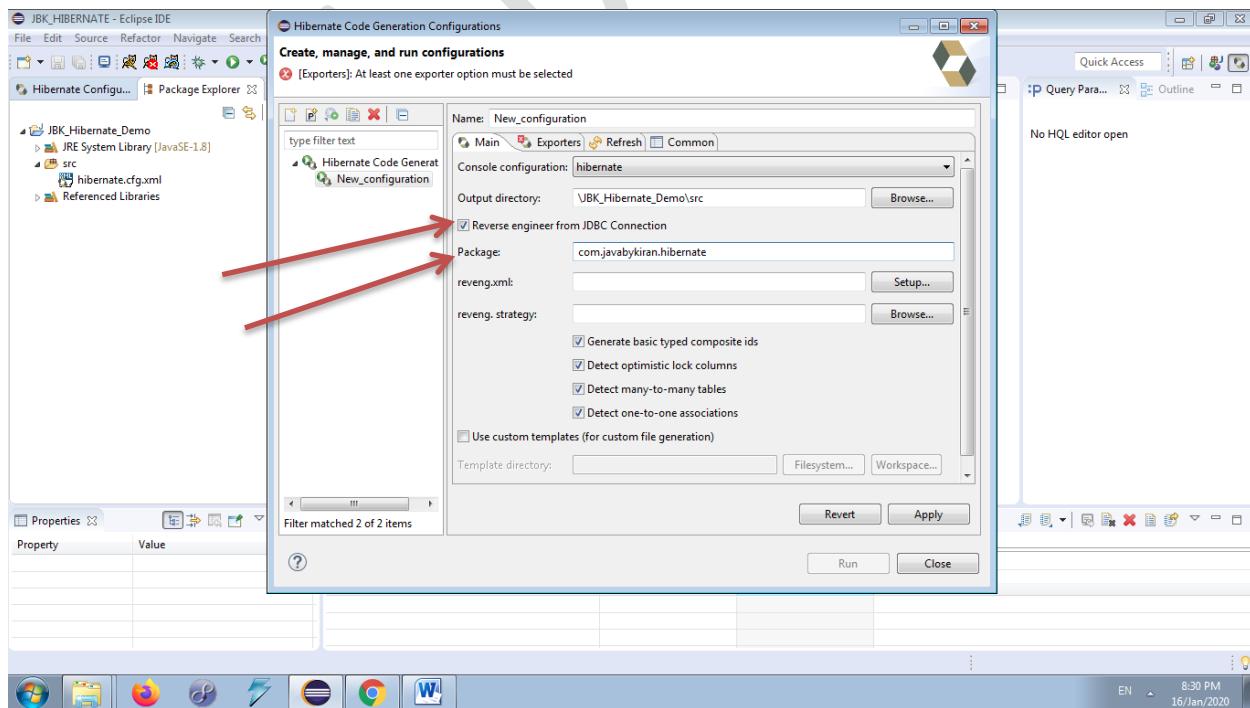
- Select your project → SRC



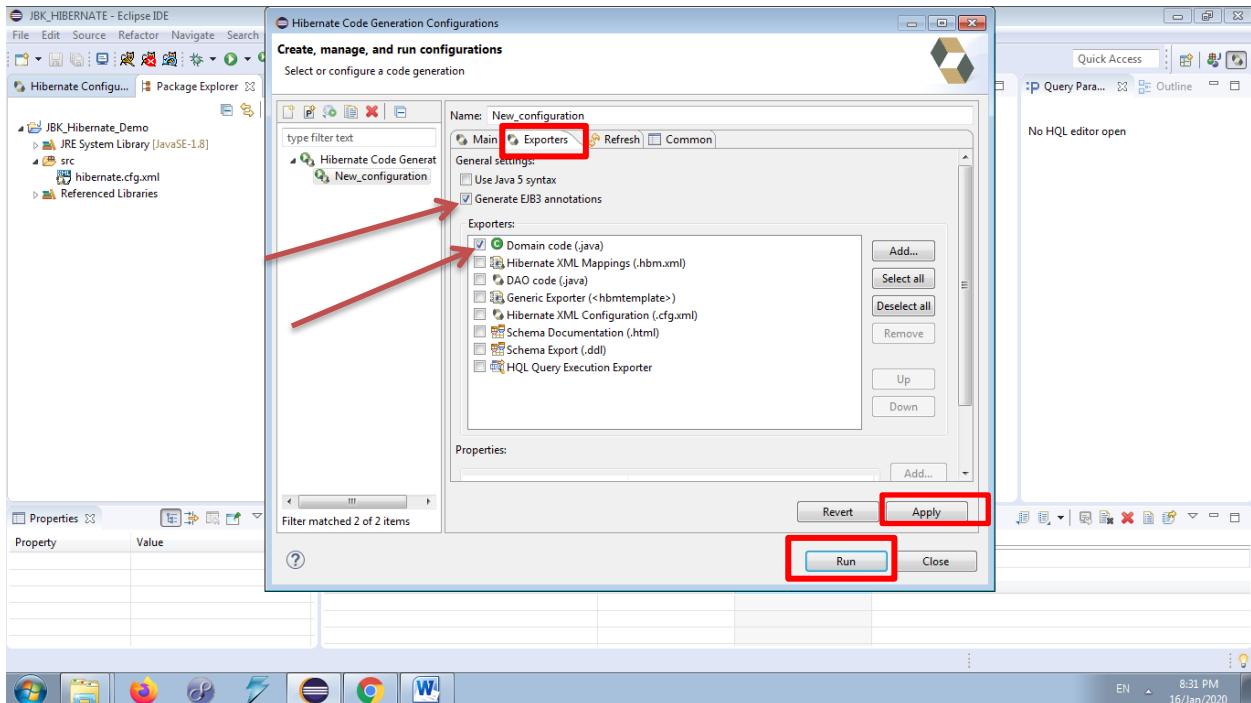
- You can see your selected path in Output Directory.



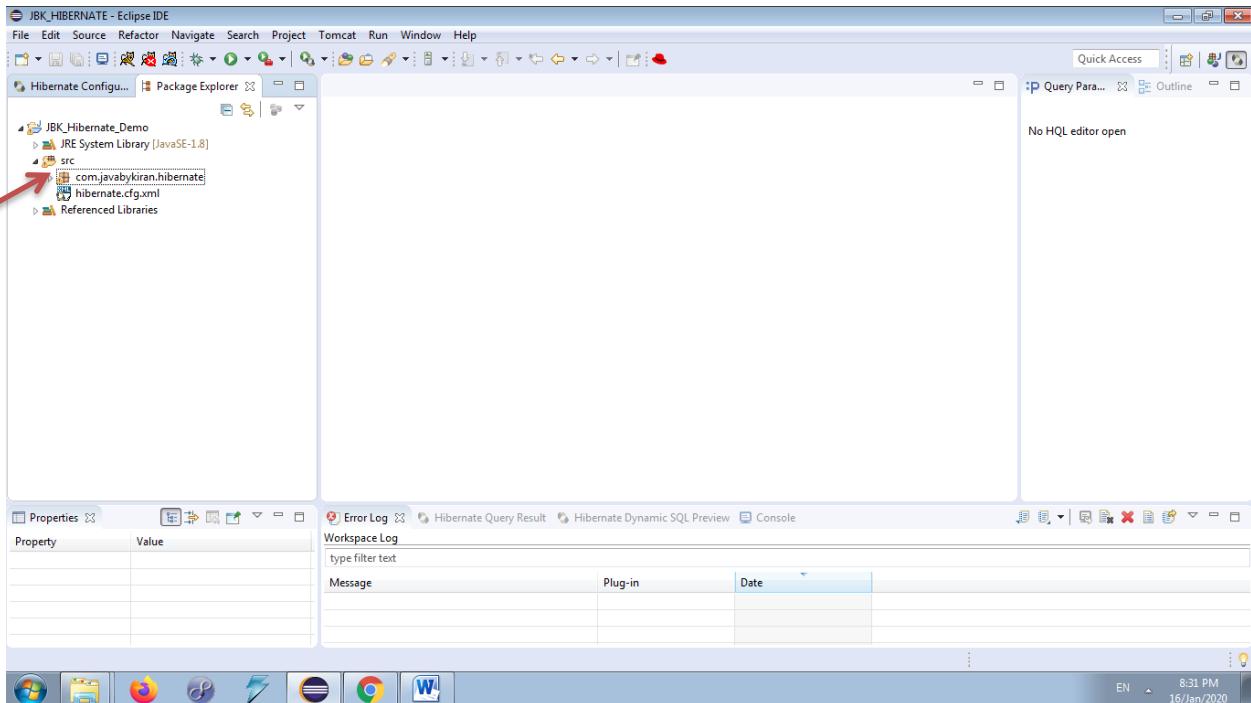
- Select Checkbox of Reverse engineer from JDBC Connection.
- Package (Name Of the Package e.g. com.javabykiran.hibernate that you want to create)



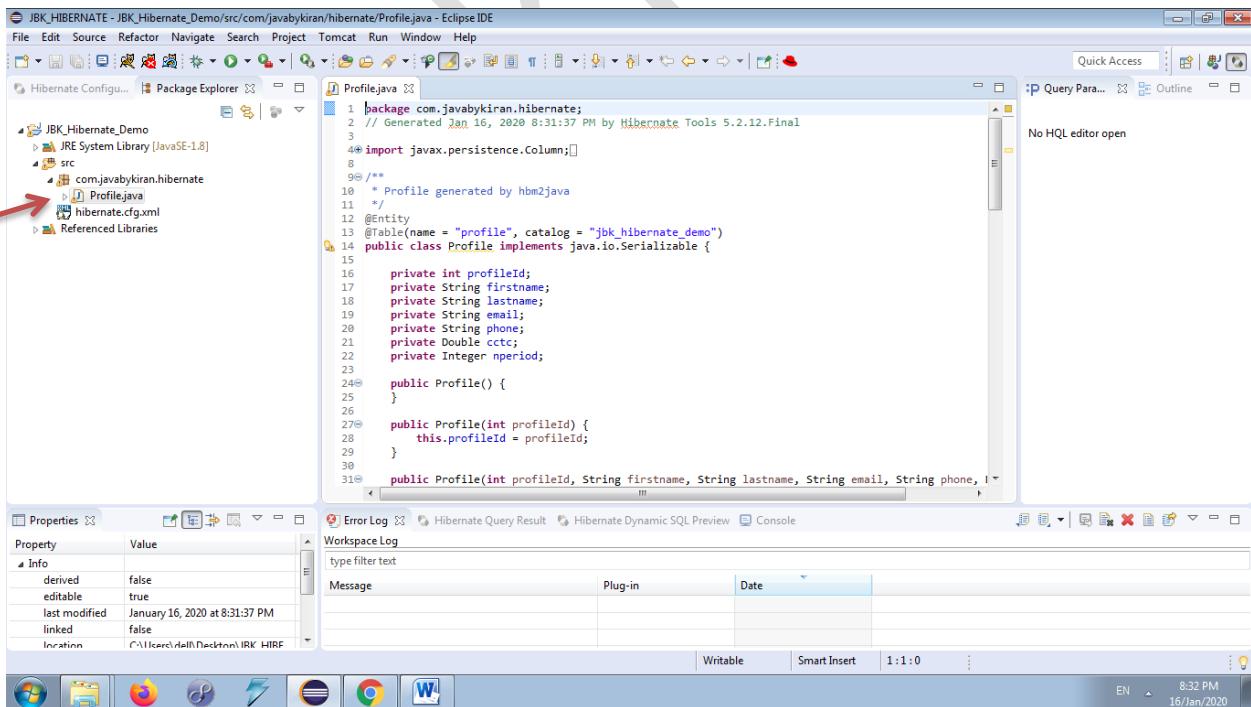
- Click On Exporters Tab
- Select checkbox of Generate EJB3 annotations.
- Select checkbox of Domain cod(java)
- Click On Apply
- Click On Run



➤ After Run → Package will be created in your project.



➤ In your Package You can see auto generated POJO's of the tables in your database.



**Step 10>**

- Write the client code.

- JBKClient.java

```
package com.javabykiran.hibernate;

import org.hibernate.Session;
import org.hibernate.SessionFactory;
import org.hibernate.Transaction;
import org.hibernate.cfg.Configuration;

public class JBKClient {
    public static void main(String[] args) {

        Configuration cfg = new Configuration();
        cfg.configure().addAnnotatedClass(Profile.class);

        SessionFactory sf = cfg.buildSessionFactory();
        Session session = sf.openSession();

        Transaction tt = session.beginTransaction();

        Profile pp = new Profile(1, "JavaByKiran",
        "JavaByKiran", "JBK", "888888888", 10.1, 30);
        session.save(pp);
        tt.commit();
        session.close();

        System.out.println("Data Stored Successfully");
    }
}
```