Project Structure

```
v  xmlconfigurationEx1
   v  src/main/java
      v  com.hibernate.xmlconfigurationEx1
         >  App.java
         >  HibernateUtil.java
         >  Student.java
      v  resources
            hibernate.cfg.xml
            Student.hbm.xml
   >  src/test/java
   >  JRE System Library [J2SE-1.5]
   >  Maven Dependencies
   >  src
   >  target
      pom.xml
```
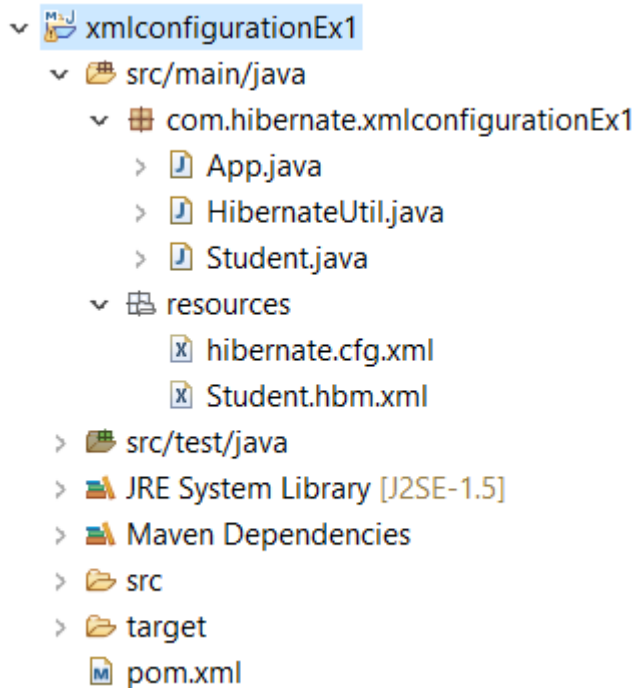
Step 1: Create Maven Project

1. Open your IDE (e.g., IntelliJ IDEA, Eclipse).
2. Create a new Maven project.
    - Group ID: com.hibernate
    - Artifact ID: xmlconfigurationEx1

Step 2: Add Dependencies to pom.xml

1. mysql-connector-j
2. hibernate-core (hibernate-core)

Step-3 Create the Student Class

Create the Student class in the com.hibernate.xmlconfigurationEx1 package:

```java
public class Student {
        private int studentId;
        private String firstName;
        private String lastName;

        public int getStudentId() { return studentId; }
        public void setStudentId(int studentId) { this.studentId = studentId; }

        public String getFirstName() { return firstName; }
        public void setFirstName(String firstName) { this.firstName = firstName; }

        public String getLastName() { return lastName; }
        public void setLastName(String lastName) { this.lastName = lastName; }
}
```

Step 4: Create the Student.hbm.xml File

1. Create a resources package under src/main/java if it doesn't already exist.

2. In the resources package, create an XML file named Student.hbm.xml with the following content:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<hibernate-mapping>
  <class name="com.hibernate.xmlconfigurationEx1.Student"
      table="Student">
   <id name="studentId" type="int" column="studentId">
     <generator class="assigned"/>
   </id>
   <property name="firstName" type="string">
     <column name="first_Name"/>
   </property>
   <property name="lastName" type="string">
     <column name="last_Name"/>
   </property>
  </class>
</hibernate-mapping>
```

Step 5: Create the hibernate.cfg.xml File

In the same resources package, create an XML file named hibernate.cfg.xml with the following content:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<hibernate-configuration>
    <session-factory>
        <property name="hibernate.connection.driver_class"> com.mysql.cj.jdbc.Driver </property>

        <property name="hibernate.connection.url">
            jdbc:mysql://localhost:3306/hibernateDB
        </property>
        <property name="hibernate.connection.username">root</property>
        <property name="hibernate.connection.password">password</property>
        <property name="hibernate.dialect">org.hibernate.dialect.MySQLDialect</property>
        <property name="show_sql">true</property>
        <property name="format_sql">true</property>
        <property name="hbm2ddl.auto">create </property>

        <mapping resource="resources/Student.hbm.xml" />
    </session-factory>
</hibernate-configuration>
```

Note: Ensure the MySQL database hibernateDB exists, and replace the username and password with your actual MySQL credentials.

Step 6: Create the HibernateUtil Class

Create the HibernateUtil class in the com.hibernate.xmlconfigurationEx1 package:

```java
package com.hibernate.xmlconfigurationEx1;
import org.hibernate.SessionFactory;
import org.hibernate.cfg.Configuration;

public class HibernateUtil {
        private static final SessionFactory sessionFactory = buildSessionFactory();
        private static SessionFactory buildSessionFactory() {
                SessionFactory sessionFactory = null;
                try {
                        Configuration configuration = new Configuration();
                        configuration.configure("resources/hibernate.cfg.xml");
                        sessionFactory = configuration.buildSessionFactory();
                }
                catch (Exception e) { e.printStackTrace(); }
                return sessionFactory;
        }

        public static SessionFactory getSessionFactory()  {
                return sessionFactory;
        }
}
```

Step-7 Now add the below lines of code into **App.java** class file.

```java
package com.hibernate.xmlconfigurationEx1;

import org.hibernate.HibernateException;
import org.hibernate.Session;
import org.hibernate.Transaction;

public class App
{
   public static void main( String[] args )
   {
     Student student = new Student();
     student.setStudentId(1);
```

```
        student.setFirstName("Kalpesh");
        student.setLastName("Patel");

        Session session = HibernateUtil.getSessionFactory().openSession();
        Transaction tran = null;
        try {
            tran = session.beginTransaction();
            session.persist(student);
            tran.commit();

            System.out.println("Student saved successfully...");
        } catch (HibernateException e) {
            System.out.println("Error :" + e.getMessage());
        }
    }
}
```

Step-7 Right click on App.java file and Run the application