



Problem 1

Consider the following 2 Entity classes :

```
User
  userId
  userName
  emailId

PhoneNumber
  phoneId
  phoneNumber
  phoneType (Home/Landline/office) [It should be persisted as enum]
  userId (Foreign Key)
```

- There is a Has-A Relationship between User and phoneNumber
1. Create a User and Phone Number Entity Class such that it creates User and Phone Number as Separate Table and One User can have multiple phone numbers
 2. Insert 2 Users with user name 'Prateek' and 'Nrupul' and both of them having 3 phone numbers each of type Home/Landline/office.
 3. Get All the phone numbers of the user
 - a. having name 'Nrupul'
 - b. having name 'Albert' (It should throw User Not Found Exception)

Reference

To make use of the persistence.xml file and for hibernate and mysql related dependencies make use of the following persistence.xml and pom.xml files with the required changes.

Sample of persistence.xml:

```
<?xml version="1.0" encoding="UTF-8"?>
<persistence xmlns="http://java.sun.com/xml/ns/persistence" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://java.sun.com/xml/ns/persistence
http://java.sun.com/xml/ns/persistence/persistence_2_0.xsd" version="2.0">
<persistence-unit name="" >
<properties>
<property name="hibernate.connection.driver_class"
value="com.mysql.cj.jdbc.Driver"/>
<property name="hibernate.connection.username" value=""/> <property name="hibernate.connection.password" value=""/> <property name="hibernate.connection.url"
value="jdbc:mysql://localhost:3306/db1"/>
<property name="hibernate.show_sql" value="true"/> <property name="hibernate.hbm2ddl.auto" value="update"/>
</properties> </persistence-unit>
</persistence>
```

Note: make appropriate changes in the above file like (persistence-unit name, database name, username, password, etc)

pom.xml

```
<!-- for changing the java version -->
<properties> <maven.compiler.source>1.8</maven.compiler.source> <maven.compiler.target>1.8</maven.compiler.target>
</properties>
<dependencies>
<!-- https://mvnrepository.com/artifact/org.hibernate/hibernate-core --> <dependency>
<groupId>org.hibernate</groupId> <artifactId>hibernate-core</artifactId> <version>5.6.11.Final</version>
```

```
</dependency>  
<!-- https://mvnrepository.com/artifact/mysql/mysql-connector-java --> <dependency>  
<groupId>mysql</groupId> <artifactId>mysql-connector-java</artifactId> <version>8.0.28</version>  
</dependency> </dependencies>
```

Note: make sure the MySQL-connector version in the above dependency, for different versions, make the change that version only.