FinTech Lab Week 2 and Week 3

Q1 Create a bank database.

Ans:

The following bank database consists of three tables:

* Customer
* Credit
* Debit

The customer table has the following attributes:

* Customer\_ID (integer value and primary key)
* Customer\_name (varchar value)
* Address (varchar value)
* Phone\_no (integer value)
* Email (varchar value)

Insert the rows into the table.

The SQL queries will be like so:

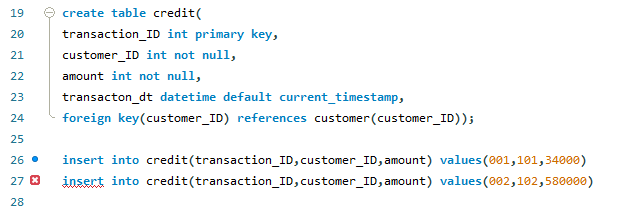


The credit table has the following attributes:

* Transaction\_ID (integer value and primary key)
* Customer\_ID (integer value and foreign key referencing customer table)
* Amount (integer value)
* Tansacton\_dt (datetime value)

Insert the rows into the table.

The SQL queries will be like so:

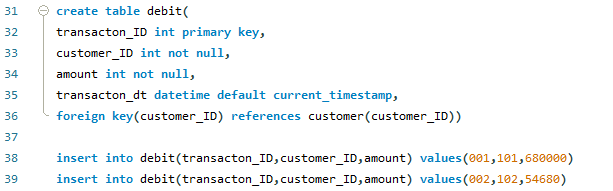


The debit table has the following attributes:

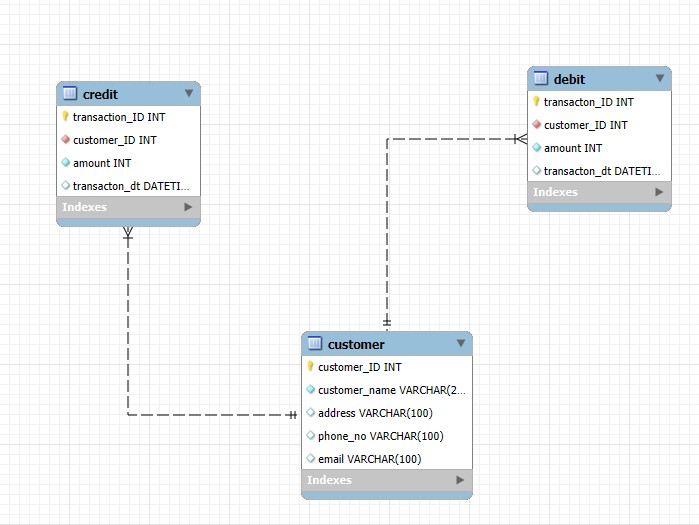
* Transaction\_ID (integer value and primary key)
* Customer\_ID (integer value and foreign key referencing customer table)
* Amount (integer value)
* Transaction\_dt (datetime value)

Insert rows into table.

The SQL queries will be like so:



The ERD for the above tables Customer, Credit and Debit in the Bank database is as follows:



Q2 Create a Cricket Database.

Ans

The following Cricket database consists of three tables:

* Players
* Batting
* Bowling

The players table has the following attributes:

* Player\_ID
* Player\_name
* Team\_name

Insert values into the table.

The SQL queries will be as follows:

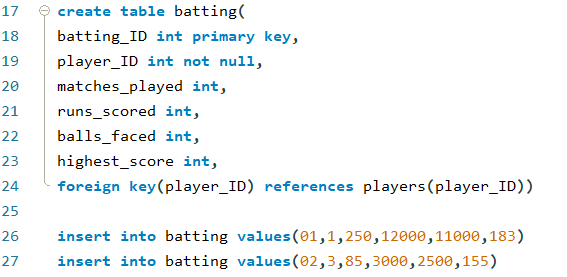


The batting table has the following attributes:

* Batting\_ID
* Player\_ID
* Matches\_played
* Runs\_scored
* Balls\_faced
* Highest\_score

Insert values into the table.

The SQL queries will be as follows:

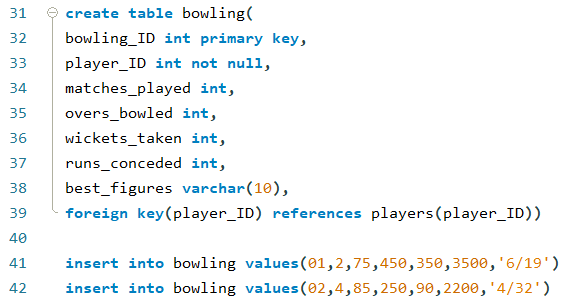


The bowling table has the following attributes:

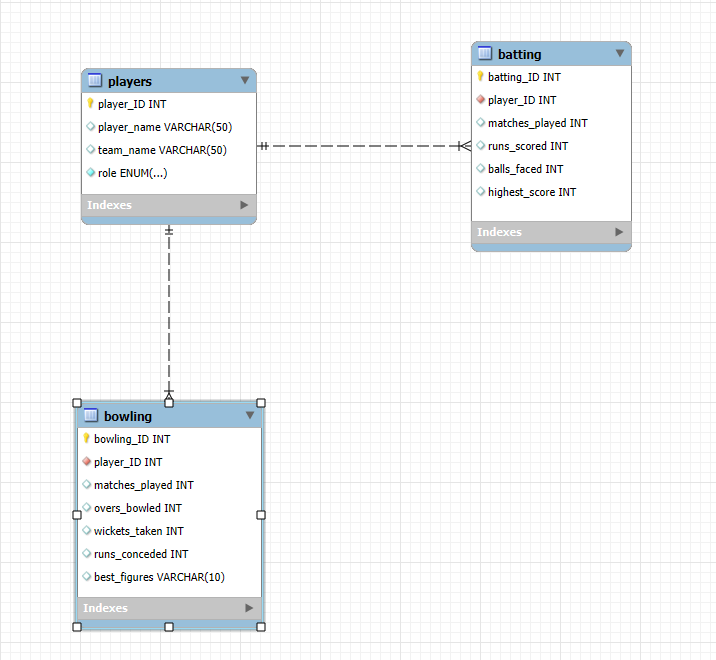
* Bowling\_ID
* Player\_ID
* Matches\_played
* Overs\_bowled
* Wickets\_taken
* Runs\_conceded
* Best\_figures

Insert values into the table.

The SQL queries are as follows:



The ERD for the tables Players, Batting and Bowling in the Cricket DB will be:



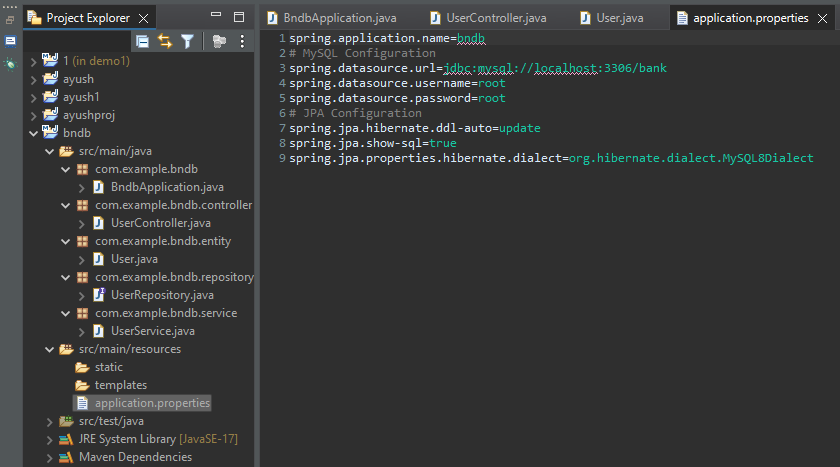
Week-3

Open up springboot and create a Maven Project named bndb with dependencies:

* Spring Web
* MySQL Driver
* Spring Data JPA

Generate, download and extract the maven file to the desired location.

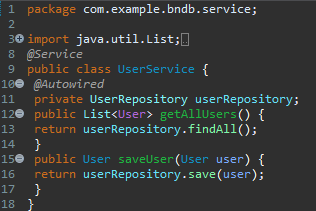
Go to: src/main/resources and open application.properties and modify the file to:



Then create a new package called com.example.bndb.entity and create a class in that package called ‘User’ as follows:



Create another package called com.example.bndb.service and inside it create a class called UserService as follows:



Create another package called com.example.bndb.repository and create a class UserRepository

