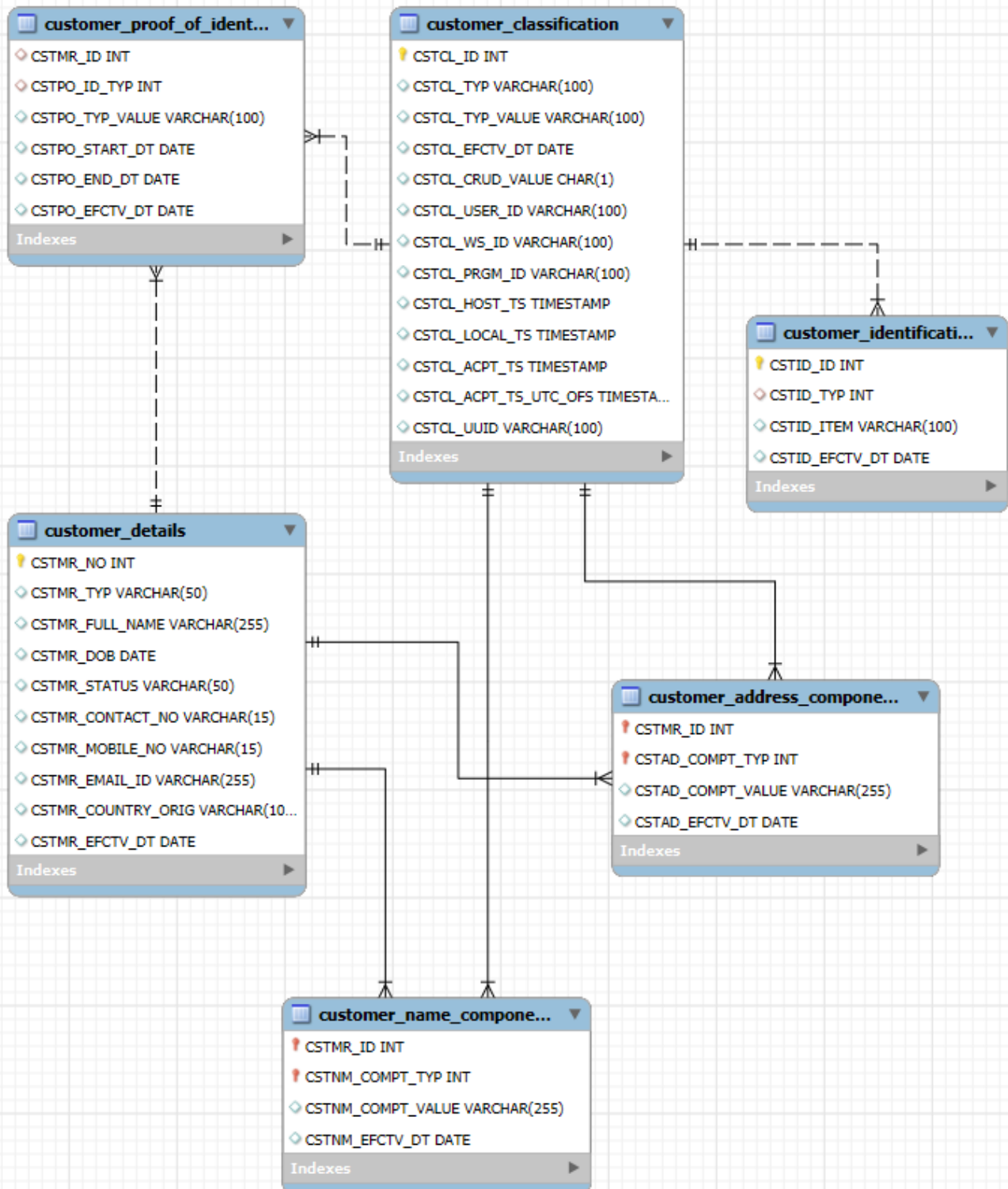


# LAB 2

## 1. Design an ERD/LDM for the above entities.



**2. Define the physical tables in the table format given as sample for Customer Classification with the data type, size and explanation of each field.**

**i. Customer Classification Table**

| Column                | Datatype     | Explanation                                |
|-----------------------|--------------|--|
| CSTCL_ID              | int PK       | Used as an identification for reference    |
| CSTCL_TYP             | varchar(100) | Classification type                        |
| CSTCL_TYP_VALUE       | varchar(100) | Classification value                       |
| CSTCL_EFCTV_DT        | date         | Effective date of the identity             |
| CSTCL_CRUD_VALUE      | char(1)      | Stores logical status of the data          |
| CSTCL_USER_ID         | varchar(100) | User who created the data                  |
| CSTCL_WS_ID           | varchar(100) | Workstation from where the data is created |
| CSTCL_PRGM_ID         | varchar(100) | Program that inserted the data             |
| CSTCL_HOST_TS         | timestamp    | Host timestamp at record insertion         |
| CSTCL_LOCAL_TS        | timestamp    | Local timestamp at record insertion        |
| CSTCL_ACPT_TS         | timestamp    | Timestamp when the record is accepted      |
| CSTCL_ACPT_TS_UTC_OFS | timestamp    | Timestamp when the record is inserted      |
| CSTCL_UUID            | varchar(100) | Unique identifier to identify the process  |

**ii. Customer Identification Table**

| Column         | Datatype     | Explanation                        |
|----------------|--------------|------------------------------------|
| CSTID_ID       | int PK       | Unique identifier for the customer |
| CSTID_TYP      | int          | Type of customer identification    |
| CSTID_ITEM     | varchar(100) | Value of item identification       |
| CSTID_EFCTV_DT | date         | Effective date of customer record  |

### iii. Customer Details Table

| Column             | Datatype     | Explanation                        |
|--------------------|--------------|------------------------------------|
| CSTMR_NO           | int PK       | Unique identifier for the customer |
| CSTMR_TYP          | varchar(50)  | Type of customer                   |
| CSTMR_FULL_NAME    | varchar(255) | Full name of customer              |
| CSTMR_DOB          | date         | Date of birth of customer          |
| CSTMR_STATUS       | varchar(50)  | Current status of customer         |
| CSTMR_CONTACT_NO   | varchar(15)  | Contact number of customer         |
| CSTMR_MOBILE_NO    | varchar(15)  | Mobile number of customer          |
| CSTMR_EMAIL_ID     | varchar(255) | Email number of customer           |
| CSTMR_COUNTRY_ORIG | varchar(100) | Country number of customer         |
| CSTMR_EFCTV_DT     | date         | Effective date of record           |

### iv. Customer Name Components Table

| Column            | Datatype     | Explanation                         |
|-------------------|--------------|-------------------------------------|
| CSTMR_ID          | int PK       | Unique identifier for the customer  |
| CSTNM_COMPT_TYP   | int PK       | Type of customer component          |
| CSTNM_COMPT_VALUE | varchar(255) | Value associated with the component |
| CSTNM_EFCTV_DT    | date         | Effective date of record            |

### v. Customer Proof of Identity Table

| Column          | Datatype     | Explanation                        |
|-----------------|--------------|------------------------------------|
| CSTMR_ID        | int          | Unique identifier for the customer |
| CSTPO_ID_TYP    | int          | Type of customer proof of identity |
| CSTPO_TYP_VALUE | varchar(100) | Value of proof of identity         |
| CSTPO_START_DT  | date         | Start date of identity proof       |
| CSTPO_END_DT    | date         | Expiry date of identity proof      |
| CSTPO_EFCTV_DT  | date         | Effective date of record           |

### vi. Customer Address Components Table

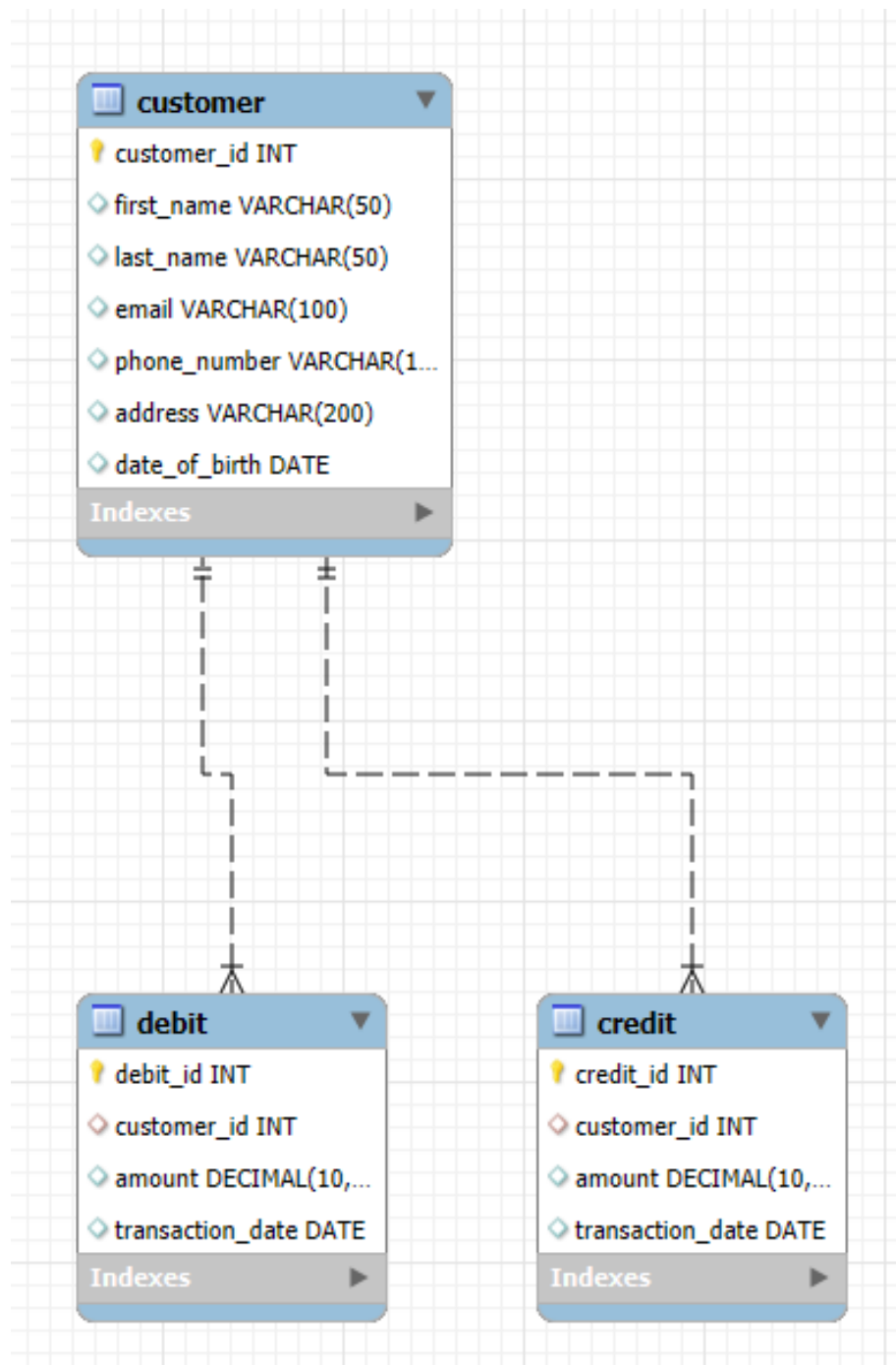
| Column            | Datatype     | Explanation                        |
|-------------------|--------------|------------------------------------|
| CSTMR_ID          | int PK       | Unique identifier for the customer |
| CSTAD_COMPT_TYP   | int PK       | Type of customer address component |
| CSTAD_COMPT_VALUE | varchar(255) | Value of address component         |
| CSTAD_EFCTV_DT    | date         | Effective date of record           |

# ADDITIONAL QUESTIONS

## Part 1: SQL Table creation queries and the ER Diagrams

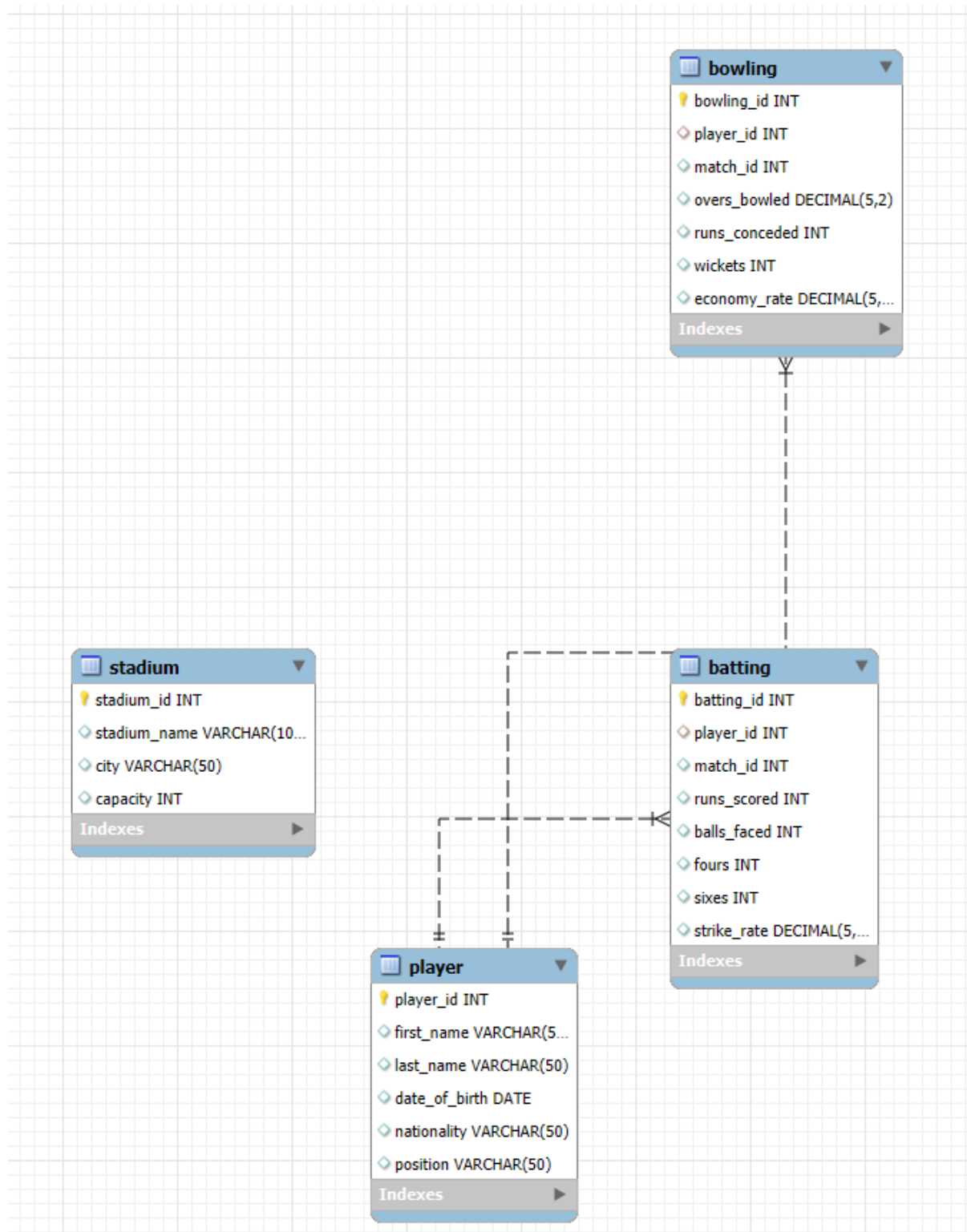
### 1. Bank Database

<https://livesql.oracle.com/ords/livesql/s/cxgrzosm6g8ftjnalhbfgx6k>



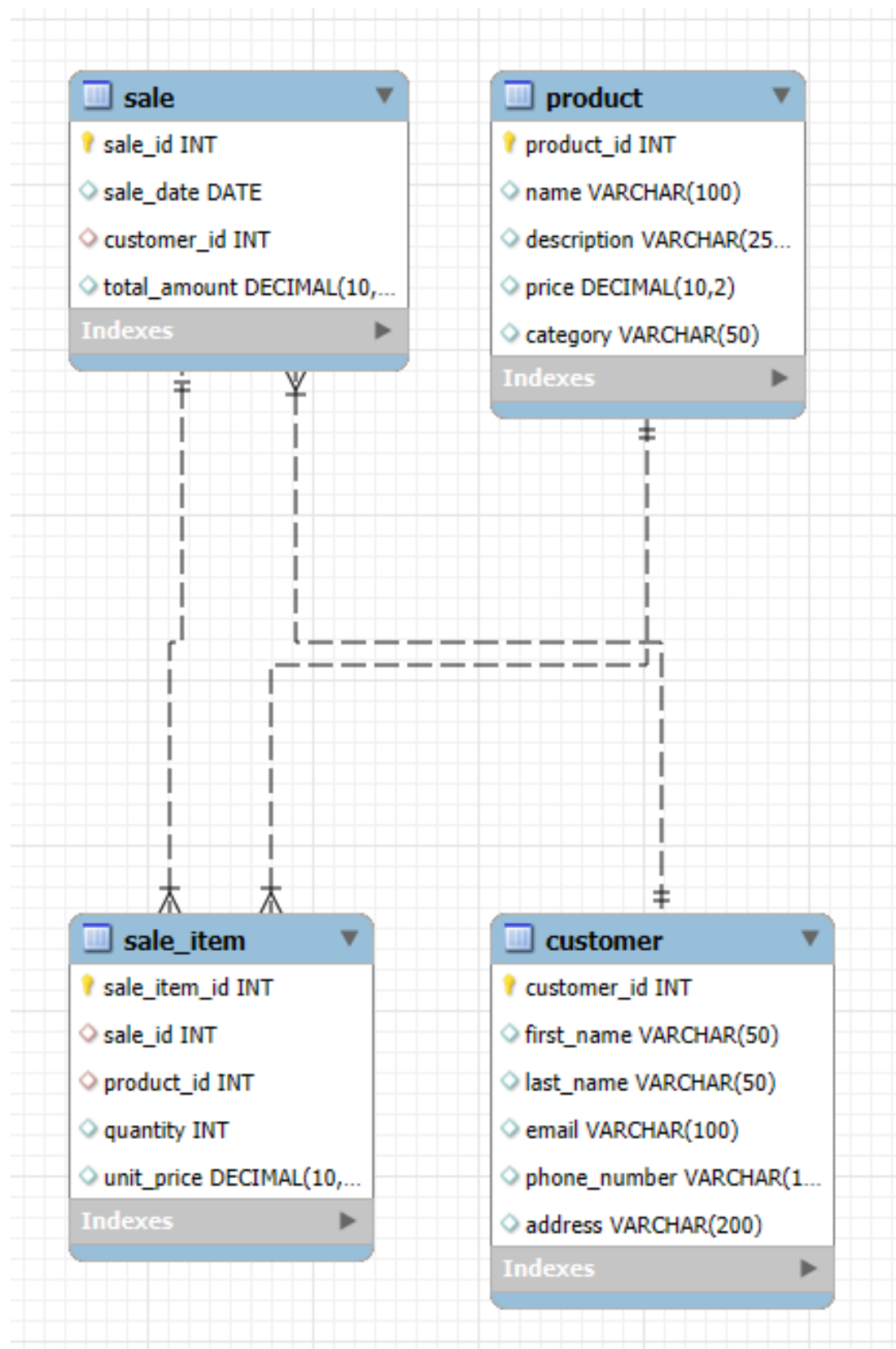
## 2. Cricket Database

<https://livesql.oracle.com/ords/livesql/s/cxgtokhhrrqidgw453khidd3aa>



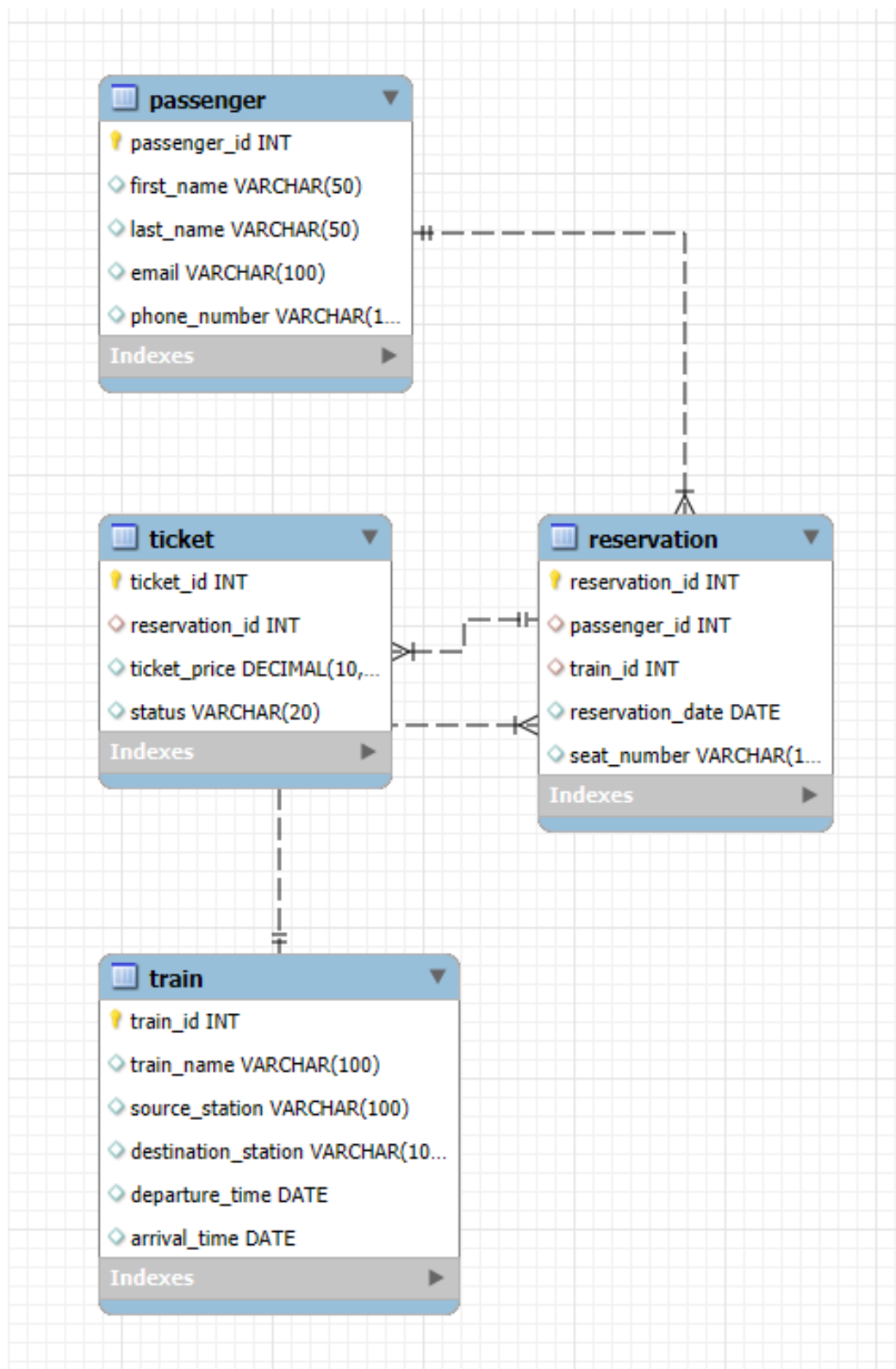
### 3. Supermarket Database

<https://livesql.oracle.com/ords/livesql/s/cxgukhy5368iqv76g88e5bm53>



#### 4. Railway Reservation System

<https://livesql.oracle.com/ords/livesql/s/cxgurp2hyxh1703jd34u1whkk>



## 5. Airline Reservation System

<https://livesql.oracle.com/ords/livesql/s/cxgr0tiaa7hmftvo505vot17g>

