|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Table** | **Attribute** | **Data Type** | **Primary Key** | **Foreign Key** | **Constraints** |
| CARDS | Card\_Type | VARCHAR(20) |  |  |  |
| CARDS | Card\_No | BIGINT | Yes |  | Unique |
| CARDS | NameOnCard | VARCHAR(30) |  |  |  |
| CARDS | SecurityCode | INT |  |  | Minimum 3, Maximum 5 digits, positive |
| CARDS | ExpMonth | INT |  |  | 2 digits, positive |
| CARDS | ExpYear | INT |  |  | 4 digits, positive |
| CARDS | IsActive | ENUM(‘Y’,’N’) |  |  | Y for Yes, N for No |
| CARDS\_CUSTOMER | Cust\_Id | BIGINT |  | CUSTOMER\_MASTER(CUST\_ID) |  |
| CARDS\_CUSTOMER | Card\_Type | VARCHAR(20) |  |  |  |
| CARDS\_CUSTOMER | Card\_No | VARCHAR(50) |  | CARDS(Card\_No) |  |
| CARDS\_CUSTOMER | CC\_BillingPostalCode | INT |  |  | 6 digits, positive, ISNULL if Card\_type is not Credit\_Card |
| CARDS\_CUSTOMER | CC\_Balance | DECIMAL(10,5) |  |  | ISNULL if Card\_type is not Credit\_Card |
| CARDS\_CUSTOMER | CC\_Limit | INT |  |  | 10 digits, ISNULL if Card\_type is not Credit\_Card |
| CARDS\_CUSTOMER | DB\_Balance | DECIMAL(15,5) |  |  | ISNULL if Card\_type is not DEBIT\_CARD |
| CARDS\_CUSTOMER | TCC\_Balance | DECIMAL(15,5) |  |  | ISNULL if Card\_type is not TRAVELCURRENCYCARD |
| CARDS\_CUSTOMER | EMI\_Amount | DECIMAL(15,5) |  |  | ISNULL if Card\_type is not EMICard |
| CARDS\_CUSTOMER | LC\_Points | INT |  |  | 10 digits,positive, ISNULL if Card\_type is not LOYALTYCARD |
| CARDS\_CUSTOMER | LC\_Amount | DECIMAL(15,5) |  |  | ISNULL if Card\_type is not LOYALTYCARD |
| CARDS\_CUSTOMER | Corp\_Amount | DECIMAL(15,5) |  |  | ISNULL if Card\_type is not CORPORATECARD |
| CUSTOMER\_MASTER | Cust\_Id | BIGINT | Yes |  | <50 digits, positive |
| CUSTOMER\_MASTER | Cust\_Name | VARCHAR(50) |  |  |  |
| CUSTOMER\_MASTER | Cust\_Dob | DATE |  |  | <Current Date |
| CUSTOMER\_MASTER | SSN | INT |  |  | 9 digits, positive |
| CUSTOMER\_MASTER | Cust\_Occ | VARCHAR(30) |  |  |  |
| CUSTOMER\_MASTER | Cust \_Email | VARCHAR(50) |  |  |  |
| CUSTOMER\_MASTER | Cust\_PhoneNo | INT |  |  | 11 digits, positive |
| CUSTOMER\_MASTER | Banker\_Id | INT |  | EMPLOYEE(BANKER\_ID) | <50 digits, positive |
| ACCOUNT | Acct\_No | BIGINT | YES |  | <50 digits, positive |
| ACCOUNT | Category | VARCHAR(20) |  |  |  |
| ACCOUNT | Branch\_Code | VARCHAR(10) |  |  |  |
| ACCOUNT | Balance | DECIMAL(15,5) |  |  |  |
| ACCOUNT | Cust\_Id | INT |  | CUST\_MASTER(CUST\_ID) | <50 digits, positive |
| ACCOUNT | Account\_Type | VARCHAR(20) |  |  |  |
| ACCOUNT | AccountOpenDate | DATE |  |  | < current date |
| ACCOUNT | AccountCloseDate | DATE |  |  | >AccountOpenDate |
| ACCOUNT | AccountMaturityDate | DATE |  |  | >AccountOpenDate |
| ACCOUNT | AvailableBalance | DECIMAL(15,5) |  |  |  |
| ACCOUNT | InterestsEarned | VARCHAR(10) |  |  | >=0, |
| ACCOUNT | Cod\_InterestType | VARCHAR(10) |  |  | >=0, ISNULL if Acct\_type is not CertificateofDeposit account |
| ACCOUNT | Cod\_EarlyWithdrawl | DECIMAL(15,5) |  |  | ISNULL if Acct\_type is not CertificateofDeposit account |
| ACCOUNT | APR | VARCHAR(10) |  |  |  |
| ACCOUNT | MM\_TransactionLimit | DECIMAL(15,5) |  |  | >0, ISNULL if Acct\_type is not Money Market account |
| ACCOUNT | IRAType | VARCHAR(20) |  |  | ISNULL if Acct\_type is not IRA account. |
| ACCOUNT | Age | INT |  |  | Age > 0 and Age < 100, ISNULL if Acct\_type is not IRA account |
| ACCOUNT | Corp\_RecurringDeposit | ENUM(‘Y’,’N’) |  |  | Y for Yes, N for No, ISNULL if Acct\_type is not Corporate account |
| LOANS | Loan\_Id | INT | YES |  | <50 digits, positive |
| LOANS | Loan\_Type | VARCHAR(20) |  |  |  |
| LOANS | Loan\_Amount | DECIMAL(15,5) |  |  |  |
| LOANS | Cust\_Id | INT |  | CUST\_MASTER(CUST\_ID) |  |
| PERSONAL\_LOAN | Personal\_Loan\_Id | INT |  | LOANS(LOAN\_ID) |  |
| PERSONAL\_LOAN | Cust\_Id | BIGINT |  | CUST\_MASTER(CUST\_ID) |  |
| PERSONAL\_LOAN | DateLoanGiven | DATE |  |  | < =current date |
| PERSONAL\_LOAN | AmountGiven | INT |  |  | >0 |
| PERSONAL\_LOAN | InterestRate | DECIMAL(15,5) |  |  | >=0 |
| PERSONAL\_LOAN | Employer\_Name | VARCHAR(50) | YES |  |  |
| PERSONAL\_LOAN | Employee\_Name | VARCHAR(50) |  |  |  |
| PERSONAL\_LOAN | Employee\_Id | VARCHAR(30) | YES |  |  |
| HOME\_LOAN | Home\_Loan\_Id | INT |  | LOANS(LOAN\_ID) | <50 digits, positive |
| HOME\_LOAN | Cust\_Id | BIGINT |  | CUST\_MASTER(CUST\_ID) | <50 digits, positive |
| HOME\_LOAN | Sale\_Deed | VARCHAR(30) | YES |  |  |
| HOME\_LOAN | DateLoanGiven | DATE |  |  | <=current date |
| HOME\_LOAN | AmountGiven | DECIMAL(15,5) |  |  | >0 |
| HOME\_LOAN | InterestRate | DECIMAL(15,5) |  |  | >=0 |
| STUDENT\_LOAN | Student\_Loan\_Id | INT |  | LOANS(LOAN\_ID) |  |
| STUDENT\_LOAN | Cust\_Id | BIGINT |  | CUST\_MASTER(CUST\_ID) |  |
| STUDENT\_LOAN | Student\_Id | VARCHAR(30) | YES |  |  |
| STUDENT\_LOAN | Student\_mail | VARCHAR(50) | YES |  |  |
| STUDENT\_LOAN | DateLoanGiven | DATE |  |  | <=current date |
| STUDENT\_LOAN | AmountGiven | DECIMAL(15,5) |  |  | >0 |
| STUDENT\_LOAN | InterestRate | DECIMAL(15,5) |  |  | >=0 |
| VEHICLE\_LOAN | Veh\_Loan\_Id | INT |  | LOANS(LOAN\_ID) |  |
| VEHICLE\_LOAN | Cust\_Id | BIGINT |  | CUST\_MASTER(CUST\_ID) |  |
| VEHICLE\_LOAN | Chassis\_No | VARCHAR(20) | YES |  |  |
| VEHICLE\_LOAN | DateLoanGiven | DATE |  |  | <=current date |
| VEHICLE\_LOAN | AmountGiven | DECIMAL(15,5) |  |  | >0 |
| VEHICLE\_LOAN | InterestRate | DECIMAL(15,5) |  |  | >=0 |
| USES\_BENEFITS | Benefit\_Id | INT |  |  | <50 digits, positive |
| USES\_BENEFITS | Cust\_Id | BIGINT |  | CUST\_MASTER(CUST\_ID) | <50 digits, positive |
| BANK | Bank\_Code | INT |  |  | 4 digits |
| BANK | Bank\_Headquaters | VARCHAR(50) |  |  |  |
| BANK | Bank\_Name | VARCHAR(50) | YES |  |  |
| BRANCH | Branch\_Code | VARCHAR(10) | YES |  |  |
| BRANCH | Branch\_Name | VARCHAR(50) |  |  |  |
| BRANCH | Manager | VARCHAR(50) |  |  |  |
| BRANCH | Assets | DECIMAL(30,5) |  |  |  |
| BRANCH | Bank\_Name | VARCHAR(50) |  | BANK(Bank\_Name) |  |
| EMPLOYEE | Banker\_Id | INT | YES |  |  |
| EMPLOYEE | Banker\_Name | VARCHAR(50) |  |  |  |
| EMPLOYEE | Address | VARCHAR(50) |  |  |  |
| EMPLOYEE | Banker\_Email | VARCHAR(50) |  |  |  |
| EMPLOYEE | Branch\_Code | INT |  |  | 4 digits |
| GETS\_ALERTS | Alert\_Id | INT | YES | ALERT(Alert\_Id) |  |
| GETS\_ALERTS | Cust\_Id | BIGINT | YES | CUSTOMER(Cust\_ID) |  |
| TRANSACTIONS | Trans\_Id | INT | YES |  |  |
| TRANSACTIONS | Trans\_Type | VARCHAR(20) |  |  |  |
| TRANSACTIONS | Trans\_Timestamp | DATE |  |  |  |
| TRANSACTIONS | Tran\_Status | ENUM(‘S’,’N’) |  |  | S for Successful, N for No |
| TRANSACTIONS | Trans\_Amt | DECIMAL(15,5) |  |  |  |
| TRANSACTIONS | Account\_Number | BIGINT |  | ACCOUNT(ACC\_No) | <50 digits, positive |
| TRANSACTIONS | Trans\_Name | VARCHAR(40) |  |  |  |
| ALERT | Alert\_Id | INT | YES |  |  |
| ALERT | Alert\_Type | VARCHAR(20) |  |  |  |
| ALERT | Alert\_Timestamp | DATE |  |  |  |
| ALERT | Cust\_Id | BIGINT |  | CUSTOMER(Cust\_ID) |  |
| ALERT | Alert\_Status | ENUM(‘R’,’N’) |  |  | R for Received, N for No |
| PENALTIES | Penalty\_Id | INT | YES |  | <50 digits, positive |
| PENALTIES | Acct\_No | BIGINT |  | Accounts(Acc\_no) | <50 digits, positive |
| PENALTIES | Penalty\_Status | ENUM(‘P’,’N’) |  |  | P for Paid, N for No |
| PENALTIES | Penalty\_Amt | DECIMAL(15,5) |  |  | >=0 |
| PENALTIES | Charged\_Date | DATE |  |  |  |
| BENEFITS | Benefit\_Id | INT | YES |  |  |
| BENEFITS | Benefit\_Type | VARCHAR(20) |  |  |  |
| BENEFITS | Cust\_Id | BIGINT |  | CUSTOMER(Cust\_ID) |  |
| BENEFITS | Benefit\_Amount | DECIMAL(15,5) |  |  | >=0 |
| BENEFITS | Benefit\_Dt | DATE |  |  |  |
|  |  |  |  |  |  |