**TASK 1.2 SQL ORACLE**

**Stage 1:**

1. **Construct and ER-Diagram for the above-mentioned Requirement**

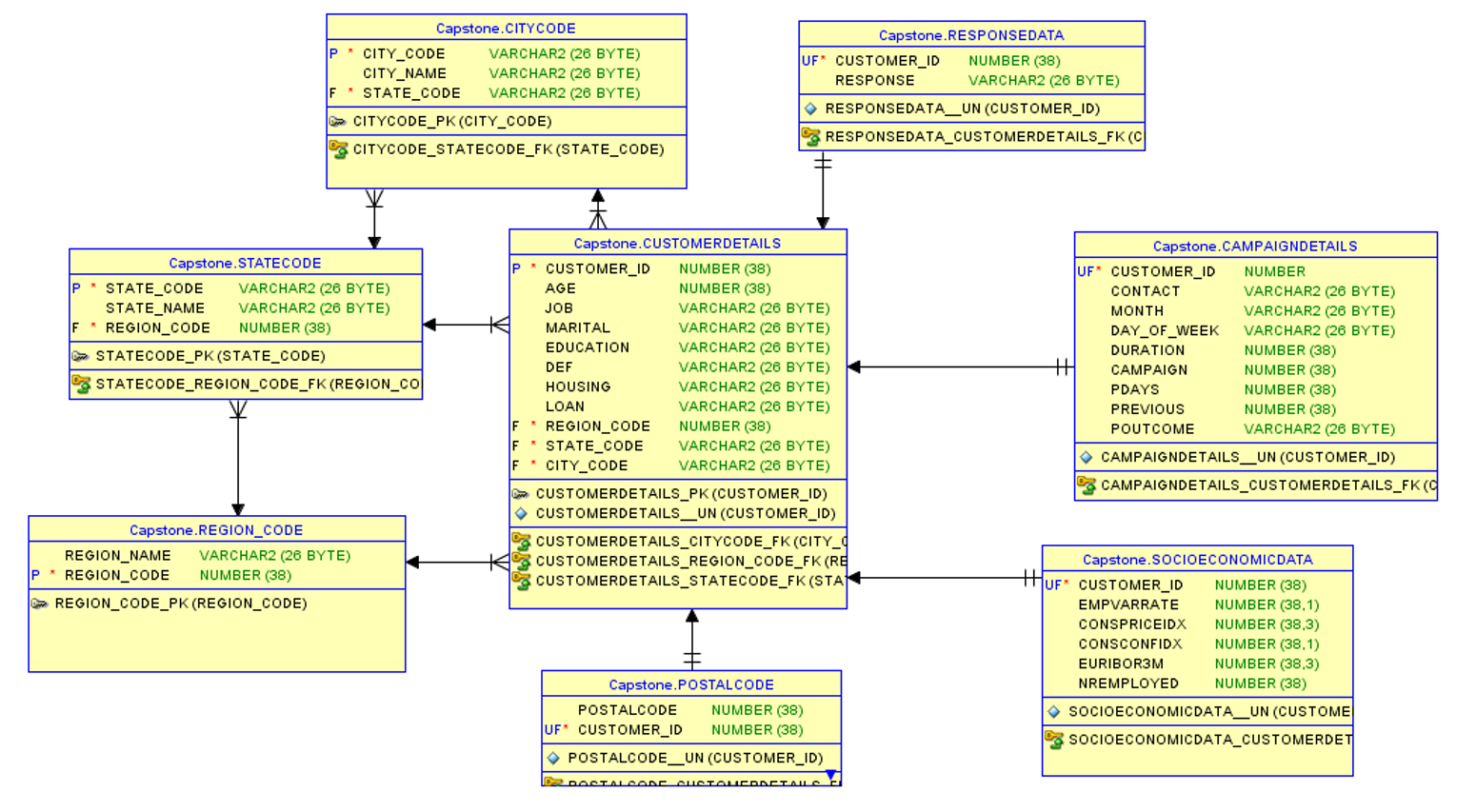


Fig: Entity Relationship Diagram

1. **Construct Tables has per the ER-Diagram.**

CREATE TABLE campaigndetails (

customer\_id NUMBER(38) NOT NULL,

contact VARCHAR2(26 BYTE),

month VARCHAR2(26 BYTE),

day\_of\_week VARCHAR2(26 BYTE),

duration NUMBER(38),

campaign NUMBER(38),

pdays NUMBER(38),

previous NUMBER(38),

poutcome VARCHAR2(26 BYTE)

)

CREATE TABLE citycode (

city\_code VARCHAR2(26 BYTE) NOT NULL,

city\_name VARCHAR2(26 BYTE),

state\_code VARCHAR2(26 BYTE)

)

CREATE TABLE customerdetails (

customer\_id NUMBER(38) NOT NULL,

age NUMBER(38),

job VARCHAR2(26 BYTE),

marital VARCHAR2(26 BYTE),

education VARCHAR2(26 BYTE),

def VARCHAR2(26 BYTE),

housing VARCHAR2(26 BYTE),

loan VARCHAR2(26 BYTE),

region\_code VARCHAR2(26 BYTE),

state\_code VARCHAR2(26 BYTE),

city\_code VARCHAR2(26 BYTE)

)

CREATE TABLE postalcode (

postalcode NUMBER(38),

customer\_id NUMBER(38) NOT NULL

)

CREATE TABLE region\_code (

region\_name VARCHAR2(26 BYTE),

region\_code NUMBER(38) NOT NULL

)

CREATE TABLE responsedata (

customer\_id NUMBER(38) NOT NULL,

response VARCHAR2(26 BYTE)

)

CREATE TABLE socioeconomicdata (

customer\_id NUMBER(38) NOT NULL,

empvarrate NUMBER(38, 1),

conspriceidx NUMBER(38, 3),

consconfidx NUMBER(38, 1),

euribor3m NUMBER(38, 3),

nremployed NUMBER(38)

)

CREATE TABLE statecode (

state\_code VARCHAR2(26 BYTE) NOT NULL,

state\_name VARCHAR2(26 BYTE),

region\_code NUMBER(38)

)

1. **Identify the relationships between tables and use appropriate standards for the same where applicable**

The "customerdetails" has **"Many to One"** relationship with "citycode”, "statecode" and "regioncode" tables.

The "responsedata”, "campaigndetails”, "socioeconomicdata" and "postalcode" tables have **"One and Only One"** relationship with the "customerdetails" table.

**Stage 2:**

1. **Generate the list of customer has per age and profession and display them according to ascending order of the age.**

select AGE,JOB from CUSTOMERDETAILS order by AGE;

**OUTPUT:**

Table

Description automatically generated with medium confidence

1. **Generate the list of customer who have no housing loan and personal loan.**

select customer\_id from CUSTOMERDETAILS where housing='no' and loan='no';

**OUTPUT:**

Table

Description automatically generated

1. **Generate the list of customers who has credit and has been contacted more than 2 times during the campaign.**

select cb.customer\_id,cb.default1,cp.campaign

from CUSTOMERDETAILS cb join CAMPAIGNDETAILS cp

ON cb.customer\_id = cp.customer\_ID

where cp.campaign>2

**OUTPUT:**

A picture containing table

Description automatically generated

1. **Generate the list of customer who has credit and has been contacted more than 2 times during the campaign and outcome of the campaign is successful.**

select cb.customer\_id,cb.default1,cp.campaign

from CUSTOMERDETAILS cb join CAMPAIGNDETAILS cp

ON cb.CUSTOMER\_ID = cp.CUSTOMER\_ID where cp.campaign>2

AND cb.default1 like 'yes' and cp.poutcome='success';

**OUTPUT:**

Table

Description automatically generated

1. **Generate the list of customers who has credit and has been contacted more than 2 times during the campaign and outcome of the campaign is failure and who have been contacted in the month of June and also display the day contacted.**

select cb.customer\_id,cb.default1,cp.campaign

from CUSTOMERDETAILS cb join CAMPAIGNDETAILS cp

ON cb.CUSTOMER\_ID = cp.CUSTOMER\_ID

where cp.campaign>2

and cp.poutcome='success'and cp.month = 'jun';

**OUTPUT:**

Table

Description automatically generated

1. **Generate report giving state-wise breakup of number of customers.**

select st.state\_name,count(customer\_id) as numberofCustomers

from CUSTOMERDETAILS cust inner join STATECODE st on cust.state\_code=st.state\_code

group by st.state\_name;

**OUTPUT:**

**Table

Description automatically generated**

1. **Generate report giving city-wise distribution of customers**

select st.city\_name,count(customer\_id) as numberofCustomers

from CUSTOMERDETAILS cust inner join CITYCODE st on cust.city\_code=st.city\_code

group by st.city\_name;

**OUTPUT:**

Table

Description automatically generated with medium confidence