

Analyzing Big Data Final Project

Part 1

To create the database follow the below steps:-

1) Create the database

Query:
CREATE DATABASE DB_CONSUMER_PANEL_FINAL;

2) Going forward use the above database

Query:
USE DB_CONSUMER_PANEL_FINAL;

3) Create **household** table. 'hh_id' would be the primary key for this table.

Query:
CREATE TABLE Households
(hh_id BIGINT NOT NULL,
hh_race INT NOT NULL,
hh_is_latinx INT NOT NULL,
hh_zip_code INT(5) NOT NULL,
hh_state VARCHAR(2) NOT NULL,
hh_income INT NOT NULL,
hh_size INT NOT NULL,
hh_residence_type INT NOT NULL,
PRIMARY KEY (hh_id));

4) Create **Products** table. 'prod_id' would be the primary key for this table.

Query:
CREATE TABLE Products
(brand_at_prod_id VARCHAR(100),
department_at_prod_id VARCHAR(100),
prod_id BIGINT NOT NULL,
group_at_prod_id VARCHAR(100),
module_at_prod_id VARCHAR(100),
amount_at_prod_id FLOAT,
units_at_prod_id VARCHAR(100),
PRIMARY KEY (prod_id));

5) Create **Trips** table. 'TC_id' would be the primary key and hh_id would be the foreign key for this table.

Query:

```
CREATE TABLE Trips
(hh_id BIGINT NOT NULL,
TC_date DATE,
TC_retailer_code INT(3),
TC_retailer_code_store_code INT(7),
TC_retailer_code_store_zip3 FLOAT,
TC_total_spent FLOAT,
TC_id BIGINT NOT NULL,
PRIMARY KEY (TC_id),
FOREIGN KEY (hh_id) REFERENCES Households (hh_id));
```

6) Create **Purchases** table.'TC_id'

Query

```
CREATE TABLE Purchases
(TC_id BIGINT NOT NULL,
quantity_at_TC_prod_id INT(3),
total_price_paid_at_TC_prod_id FLOAT,
coupon_value_at_TC_prod_id FLOAT,
deal_flag_at_TC_prod_id FLOAT,
prod_id BIGINT NOT NULL,
FOREIGN KEY (TC_id) REFERENCES Trips (TC_id),
FOREIGN KEY (prod_id) REFERENCES Products (prod_id))
```