CREATE TABLE Users (username CHAR (20),

Password CHAR (20),

Income INTEGER,

Age INTEGER,

Gender CHAR (6),

Rating INTEGER,

Last\_name CHAR (20),

First\_name CHAR (20),

PRIMARY KEY (username));

CREATE TABLE Address (State CHAR (20),

City CHAR (20),

Street CHAR (100),

Zip CHAR (5),

PRIMARY KEY (Street));

CREATE TABLE Lives\_in (username CHAR (20),

State CHAR (20),

City CHAR (20),

Street CHAR (100),

Zip CHAR (5),

FOREIGN KEY (username) REFERENCES Users (username)

ON DELETE CASCADE);

CREATE TABLE Phones (Phone\_No CHAR (10),

Username CHAR (20),

PRIMARY KEY (Phone\_No),

FOREIGN KEY (username) REFERENCES Users (username)

ON DELETE CASCADE);

CREATE TABLE Credit\_Cards (Card\_No CHAR (12),

Exp\_date TIMESTAMP,

Type CHAR (20),

username CHAR (20),

PRIMARY KEY (Card\_No),

FOREIGN KEY (username) REFERENCES Users (username)

ON DELETE CASCADE);

CREATE TABLE Dealers (dname CHAR (50),

Account CHAR (20),

Rating INTEGER,

Phone\_No CHAR(10),

PRIMARY KEY (dname));

CREATE TABLE Locates (dname CHAR (50),

State CHAR (20),

City CHAR (20),

Street CHAR (100),

Zip CHAR (5),

FOREIGN KEY (dname) REFERENCES Dealers (dname)

ON DELETE CASCADE);

CREATE TABLE Cars (VIN CHAR (17),

Year CHAR (4),

Mileage REAL,

Make CHAR (20),

Model CHAR (20),

Body\_type CHAR (20),

Fuel CHAR (15),

Exterior\_color CHAR (10),

Interior\_color CHAR (10),

Drivetrain CHAR (3),

Transmission CHAR (20),

Engine CHAR (20),

Condition CHAR (4), //ie.used

PRIMARY KEY (VIN));

REFINE

//create User table

CREATE TABLE Users (username CHAR (20),

AddressID CHAR (20),

Password CHAR (20),

Dob CHAR (8),

Income INTEGER,

Phone1 CHAR (10),

Phone2 CHAR (10),

Gender CHAR (6),

Rating INTEGER,

Last\_name CHAR (20),

First\_name CHAR (20),

PRIMARY KEY (username)

FOREIGN KEY (AddressID) REFERENCE Address (AddressID));

//Can’t fit 3NF so pull email (unique) out into a new table

CREATE TABLE Reg (username CHAR (20),

Email CHAR (50),

UNIQUE (Email),

FOREIGN KEY (username) REFERENCE User (username));

//

CREATE TABLE Credit\_Card (Card\_No CHAR (12),

Exp\_date TIMESTAMP,

Type CHAR (20),

PRIMARY KEY (Card\_No));

CREATE TABLE Payment (username CHAR (20),

Card\_No CHAR (12),

FOREIGN KEY (username) REFERENCE Users (username),

FOREIGN KEY (Card\_No) REFERENCE Credit\_Card (Card\_No),

ON DELETE CASCADE);

CREATE TABLE Address (AddressID CHAR (20),

State CHAR (20),

City CHAR (20),

Street CHAR (100),

PRIMARY KEY (AddressID));

CREATE TABLE Dealers (dname CHAR (50),

Account CHAR (20),

Rating INTEGER,

Phone\_No CHAR(10),

AddressID CHAR (20),

PRIMARY KEY (dname)

FOREIGN KEY (AddressID) REFERENCE Address (AddressID));

CREATE TABLE Owns (VIN CHAR (17),

dname CHAR (50),

FOREIGN KEY (VIN) REFERENCE Cars (VIN),

FOREIGN KEY (dname) REFERENCE Dealers (dname),

ON DELETE CASCADE);

CREATE TABLE Buys (username CHAR (20),

VIN CHAR (17),

Price REAL,

Time TIMESTAMP,

FOREIGN KEY (username) REFERENCE Users (username),

FOREIGN KEY (VIN) REFERENCE Cars (VIN),

ON DELETE CASCADE);

CREATE TABLE Bidding (VIN CHAR (17),

Price REAL,

Time TIMESTAMP,

username CHAR (20),

PRIMARY KEY (username,VIN),

FOREIGN KEY (username) REFERENCE Users (username),

FOREIGN KEY (VIN) REFERENCE Cars (VIN),

ON DELETE CASCADE);

CREATE TABLE Cars (VIN CHAR (17),

Year CHAR (4),

Mileage REAL,

Make CHAR (20),

Model CHAR (20),

Body\_type CHAR (20),

Fuel CHAR (15),

Exterior\_color CHAR (10),

Interior\_color CHAR (10),

Drivetrain CHAR (3),

Transmission CHAR (20),

Engine CHAR (20),

Condition CHAR (4), //ie.used

Current\_bid CHAR (20),

PRIMARY KEY (VIN)

FOREIGN KEY (Current\_bid) REFERENCE Bidding (BidID));

CREATE TABLE Comment (username CHAR (20),

Dname CHAR (50),

Comment CHAR (1000),

Date TIMESTAMP,

PRIMARY (username, dname),

FOREIGN KEY (username) REFERENCE Users (username),

FOREIGN KEY (dname) REFERENCE Dealers (dname),

ON DELETE CASCADE);