

```
drop table address;  
drop table book;  
drop table cart;  
drop table creditcard;  
drop table electronics;  
drop table item;  
drop table transaction;  
drop table university;  
drop table user;
```

```
CREATE TABLE University(  
  universityid INT UNSIGNED NOT NULL AUTO_INCREMENT,  
  universityname VARCHAR(80) NOT NULL,  
  logo VARCHAR(80),  
  PRIMARY KEY(universityname),  
  INDEX (universityid));
```

```
CREATE TABLE User(  
  username VARCHAR(20) NOT NULL,  
  password CHAR(40) NOT NULL,  
  first_name VARCHAR(20),  
  last_name VARCHAR(20),  
  universityid INT UNSIGNED NOT NULL,  
  email VARCHAR(40),  
  registration DATE NOT NULL,  
  icon VARCHAR(20),  
  PRIMARY KEY (username),  
  INDEX (last_name),  
  INDEX (first_name),  
  INDEX (universityid),  
  FOREIGN KEY (universityid) REFERENCES University (universityid) ON DELETE NO  
    ACTION ON UPDATE CASCADE);
```

```
CREATE TABLE Address(  
  addressid INT UNSIGNED NOT NULL AUTO_INCREMENT,  
  username VARCHAR(20) NOT NULL,  
  street VARCHAR(30) NOT NULL,  
  city VARCHAR(15) NOT NULL,  
  state CHAR(2) NOT NULL,  
  zip VARCHAR(5) NOT NULL,  
  addresstype ENUM("Billing", "Delivery") DEFAULT "Billing",  
  PRIMARY KEY (username, street, city, state, addresstype),  
  INDEX (zip),
```

```
INDEX (addressid),  
FOREIGN KEY (username) REFERENCES User (username) ON DELETE CASCADE ON  
UPDATE CASCADE);
```

```
CREATE TABLE CreditCard(  
cardid INT UNSIGNED NOT NULL AUTO_INCREMENT,  
card VARCHAR(16) NOT NULL,  
transaction_id MEDIUMINT UNSIGNED NOT NULL,  
username VARCHAR(20) NOT NULL,  
cardholder VARCHAR(40) NOT NULL,  
cardtype ENUM("American Express", "Discover", "Master Card", "Visa") DEFAULT "Visa",  
expDate VARCHAR(5) NOT NULL,  
addressid INT UNSIGNED NOT NULL,  
PRIMARY KEY (card, username),  
INDEX (cardid),  
INDEX (username),  
INDEX (transaction_id),  
FOREIGN KEY (transaction_id) REFERENCES Transaction (transaction_id) ON DELETE  
CASCADE ON UPDATE CASCADE,  
FOREIGN KEY (addressid) REFERENCES Address(addressid) ON DELETE CASCADE ON  
UPDATE CASCADE,  
FOREIGN KEY (username) REFERENCES User (username) ON DELETE CASCADE ON  
UPDATE CASCADE);
```

```
CREATE TABLE Item(  
itemid INT UNSIGNED NOT NULL AUTO_INCREMENT,  
itemowner VARCHAR(15) NOT NULL,  
universityid INT UNSIGNED NOT NULL,  
title VARCHAR(50) NOT NULL,  
description VARCHAR(100),  
itemtype ENUM("New", "Used") DEFAULT "New",  
special ENUM("Normal", "Electronic", "Book") DEFAULT "Normal",  
itemcondition ENUM("Excellent", "Good", "Average", "Poor") DEFAULT "Average",  
price FLOAT UNSIGNED NOT NULL,  
image VARCHAR(50),  
date TIMESTAMP,  
views INT UNSIGNED DEFAULT 0,  
PRIMARY KEY(itemid),  
INDEX (itemowner),  
INDEX (special),  
INDEX (itemtype),  
INDEX (views),
```

```
FOREIGN KEY (itemowner) REFERENCES User (username) ON DELETE CASCADE ON
UPDATE CASCADE,
FOREIGN KEY (universityid) REFERENCES University (universityid) ON DELETE NO
ACTION ON UPDATE CASCADE);
```

```
CREATE TABLE Electronics(
itemid INT UNSIGNED NOT NULL,
make VARCHAR(20) NOT NULL,
model VARCHAR(20) NOT NULL,
year SMALLINT(4) UNSIGNED,
PRIMARY KEY(itemid),
INDEX (make, model),
FOREIGN KEY (itemid) REFERENCES Item (itemid) ON DELETE CASCADE ON UPDATE
CASCADE);
```

```
CREATE TABLE Book(
itemid INT UNSIGNED NOT NULL,
isbn BIGINT(13) UNSIGNED NOT NULL,
author CHAR(30),
edition INTEGER,
PRIMARY KEY (itemid),
CHECK (isbn > 9999999999999),
INDEX (isbn),
FOREIGN KEY (itemid) REFERENCES Item (itemid) ON DELETE CASCADE ON UPDATE
CASCADE);
```

```
CREATE TABLE Transaction(
transaction_id MEDIUMINT UNSIGNED NOT NULL,
buyer VARCHAR(15) NOT NULL,
seller VARCHAR(15) NOT NULL,
itemid INT UNSIGNED NOT NULL,
date TIMESTAMP NOT NULL,
addressid INT UNSIGNED NOT NULL,
shipped ENUM("Yes", "No") DEFAULT "No",
PRIMARY KEY (itemid),
INDEX (date),
INDEX (transaction_id),
FOREIGN KEY (addressid) REFERENCES Address(addressid) ON DELETE CASCADE ON
UPDATE CASCADE,
FOREIGN KEY (buyer) REFERENCES User (username) ON DELETE NO ACTION ON
UPDATE NO ACTION,
FOREIGN KEY (seller) REFERENCES User (username) ON DELETE NO ACTION ON
UPDATE NO ACTION,
```

```
FOREIGN KEY (itemid) REFERENCES Item (itemid) ON DELETE NO ACTION ON UPDATE  
NO ACTION);
```

```
CREATE TABLE Cart(  
viewer VARCHAR(15) NOT NULL,  
seller VARCHAR(15) NOT NULL,  
itemid INT UNSIGNED NOT NULL,  
price DECIMAL(5, 2) UNSIGNED NOT NULL,  
PRIMARY KEY (itemid, viewer),  
INDEX (viewer),  
INDEX (seller),  
FOREIGN KEY (viewer) REFERENCES User (username) ON DELETE CASCADE ON  
UPDATE CASCADE,  
FOREIGN KEY (seller) REFERENCES User (username) ON DELETE CASCADE ON  
UPDATE CASCADE,  
FOREIGN KEY (itemid) REFERENCES Item (itemid) ON DELETE CASCADE ON UPDATE  
CASCADE);
```

```
insert into university(universityname, logo) values("Rutgers University - New Brunswick",  
"rutgers.png");
```

```
insert into university(universityname, logo) values("Rutgers University - Newark",  
"rutgers.png");
```

```
insert into university(universityname, logo) values("Rutgers University - Camden",  
"rutgers.png");
```

```
insert into university(universityname, logo) values("Princeton University", "princeton.png");
```

```
insert into university(universityname, logo) values("New York University", "nyu.jpg");
```

```
insert into university(universityname, logo) values("Columbia University", "columbia.png");
```

```
insert into university(universityname, logo) values("Widener University", "widener.jpg");
```

```
insert into user (username, password, first_name, last_name, universityid, email, registration)  
values ("kasa288", sha1("jkasa"), "Jaya", "Kasa", (select universityid from university  
where universityname = "Rutgers University - New Brunswick"),  
"kasa288@gmail.com", utc_date());
```

```
insert into user (username, password, first_name, last_name, universityid, email, registration)  
values ("gkasa", sha1("gkasa"), "Gangadhar", "Kasa", (select universityid from  
university where universityname = "Rutgers University - New Brunswick"),  
"gkasa@gmail.com", utc_date());
```

```
insert into user (username, password, first_name, last_name, universityid, email, registration)  
values ("aavvaru", sha1("aavvaru"), "Annapurna", "Avvaru", (select universityid from  
university where universityname = "Rutgers University - New Brunswick"),  
"anna.avvaru@gmail.com", utc_date());
```

```

insert into user (username, password, first_name, last_name, universityid, email, registration)
values ("lkasa", sha1("lkasa"), "Leena", "Kasa", (select universityid from university
where universityname = "Widener University"), "lkasa@gmail.com", utc_date());
insert into user (username, password, first_name, last_name, universityid, email, registration)
values ("jwang", sha1("jwang"), "Jasmine", "Wang", (select universityid from university
where universityname = "Princeton University"), "jwang@gmail.com", utc_date());
insert into user (username, password, first_name, last_name, universityid, email, registration)
values ("sli", sha1("sli"), "Sherry", "Li", (select universityid from university where
universityname = "Princeton University"), "sli@gmail.com", utc_date());
insert into user (username, password, first_name, last_name, universityid, email, registration)
values ("marky", sha1("marky"), "Mark", "Young", (select universityid from university
where universityname = "Columbia University"), "kasa288@gmail.com", utc_date());
insert into user (username, password, first_name, last_name, universityid, email, registration)
values ("delk", sha1("delk"), "Doug", "Elkerson", (select universityid from university
where universityname = "Columbia University"), "delk@gmail.com", utc_date());

```

```

insert into item (itemowner, universityid, title, description, itemcondition, price, image, date,
itemtype, special, views) values ((select username from user where username =
"kasa288"), (select universityid from user where username = "kasa288"), "Nexus 5",
"SmartPhone 2013 from Google", "Excellent", 300.00, "nexus5.jpeg", utc_timestamp(),
"New", "Electronic", 7);

```

```

insert into electronics (itemid, make, model, year) values ((select itemid from item where title =
"Nexus 5" and itemowner = "kasa288"), "LG", "Nexus 5", 2013);

```

```

insert into item (itemowner, universityid, title, description, itemcondition, price, image, date,
itemtype, special, views) values ((select username from user where username =
"kasa288"), (select universityid from user where username = "kasa288"), "Toshiba
S55T", "Touchscreen Laptop 2013 from Toshiba", "Excellent", 900.00, "S55t.jpg",
utc_timestamp(), "Used", "Electronic", 6);

```

```

insert into electronics (itemid, make, model, year) values ((select itemid from item where title =
"Toshiba S55T" and itemowner = "kasa288"), "Toshiba", "S55T5", 2013);

```

```

insert into item (itemowner, universityid, title, description, itemcondition, price, image, date,
itemtype, special, views) values ((select username from user where username =
"kasa288"), (select universityid from user where username = "kasa288"), "Nexus 7",
"Touchscreen Lablet 2012 from ASUS", "Poor", 100.00, "nexus7.jpg", utc_timestamp(),
"Used", "Electronic", 5);

```

```

insert into electronics (itemid, make, model, year) values ((select itemid from item where title =
"Nexus 7" and itemowner = "kasa288"), "Asus", "Nexus 7", 2012);

```

```
insert into item (itemowner, universityid, title, description, itemcondition, price, image, date,
itemtype, special) values ((select username from user where username = "lkasa"),
(select universityid from user where username = "lkasa"), "Nexus 5", "SmartPhone
2013 from Google", "Excellent", 300.00, "nexus5.jpeg", utc_timestamp(), "New",
"Electronic");
```

```
insert into electronics (itemid, make, model, year) values ((select itemid from item where title =
"Nexus 5" and itemowner = "lkasa"), "LG", "Nexus 5", 2013);
```

```
insert into item (itemowner, universityid, title, description, itemcondition, price, image, date,
itemtype, special) values ((select username from user where username = "lkasa"),
(select universityid from user where username = "lkasa"), "Macbook Pro", "Macbook
Laptop 2009 from Apple", "Good", 900.00, "macbookpro.jpg", utc_timestamp(), "New",
"Electronic");
```

```
insert into electronics (itemid, make, model, year) values ((select itemid from item where title =
"Macbook Pro" and itemowner = "lkasa"), "Apple", "Macbook Pro", 2009);
```

```
insert into item (itemowner, universityid, title, description, itemcondition, price, image, date,
itemtype, special, views) values ((select username from user where username =
"aavvaru"), (select universityid from user where username = "aavvaru"), "iPhone 6
Plus", "SmartPhone 2014 from Apple", "Excellent", 900.00, "iphone6.jpg",
utc_timestamp(), "New", "Electronic", 8);
```

```
insert into electronics (itemid, make, model, year) values ((select itemid from item where title =
"iPhone 6 Plus" and itemowner = "aavvaru"), "Apple", "iPhone 6", 2014);
```

```
insert into item (itemowner, universityid, title, description, itemcondition, price, image, date,
itemtype, special) values ((select username from user where username = "gkasa"),
(select universityid from user where username = "gkasa"), "iPhone 6 Plus",
"SmartPhone 2014 from Apple", "Excellent", 900.00, "iphone6.jpg", utc_timestamp(),
"New", "Electronic");
```

```
insert into electronics (itemid, make, model, year) values ((select itemid from item where title =
"iPhone 6 Plus" and itemowner = "gkasa"), "Apple", "iPhone 6", 2014);
```

```
insert into item (itemowner, universityid, title, description, itemcondition, price, image, date,
itemtype, special) values ((select username from user where username = "delk"),
(select universityid from user where username = "delk"), "Samsung SmartTV",
"SmartTV 2013 from Samsung", "Average", 600.00, "samsungsmarttv.jpg",
utc_timestamp(), "New", "Electronic");
```

```
insert into electronics (itemid, make, model, year) values ((select itemid from item where title =  
"Samsung SmartTV" and itemowner = "delk"), "Samsung", "SmartTV", 2013);
```

```
insert into item (itemowner, universityid, title, description, itemcondition, price, image, date,  
itemtype, special, views) values ((select username from user where username =  
"jwang"), (select universityid from user where username = "jwang"), "Samsung  
SmartTV", "SmartTV 2015 from Samsung", "Good", 600.00, "samsungsmarttv.jpg",  
utc_timestamp(), "New", "Electronic", 4);
```

```
insert into electronics (itemid, make, model, year) values ((select itemid from item where title =  
"Samsung SmartTV" and itemowner = "jwang"), "Samsung", "SmartTV", 2015);
```

```
insert into item (itemowner, universityid, title, description, itemcondition, price, image, date,  
itemtype, special) values ((select username from user where username = "marky"),  
(select universityid from user where username = "marky"), "Sony PS4", "GameSystem  
2014 from Sony", "Excellent", 400.00, "ps4.png", utc_timestamp(), "Used",  
"Electronic");
```

```
insert into electronics (itemid, make, model, year) values ((select itemid from item where title =  
"Sony PS4" and itemowner = "marky"), "Sony", "PS4", 2014);
```

```
insert into item (itemowner, universityid, title, description, itemcondition, price, image, date,  
itemtype, special) values ((select username from user where username = "sli"), (select  
universityid from user where username = "sli"), "Microsoft Xbox One", "GameSystem  
2014 from Microsoft", "Good", 200.00, "xboxone.jpg", utc_timestamp(), "Used",  
"Electronic");
```

```
insert into electronics (itemid, make, model, year) values ((select itemid from item where title =  
"Microsoft Xbox One" and itemowner = "sli"), "Microsoft", "Xbox One", 2014);
```

```
insert into item (itemowner, universityid, title, description, itemcondition, price, image, date,  
itemtype, special) values ((select username from user where username = "marky"),  
(select universityid from user where username = "marky"), "Practical Android Projects",  
"Book with practice android projects", "Average", 400.00,  
"practicalandroidprojects.jpg", utc_timestamp(), "Used", "Book");
```

```
insert into book (itemid, isbn, author, edition) values ((select itemid from item where title =  
"Practical Android Projects" and itemowner = "marky"), "9781430232438", "Lucas  
Jordan, Pieter Greyling", 1);
```

```
insert into item (itemowner, universityid, title, description, itemcondition, price, image, date,  
itemtype, special) values ((select username from user where username = "sli"), (select
```

```
universityid from user where username = "sli"), "CSS3: Visual QuickStart Guide",  
"Book on CSS3", "Average", 20.00, "css3visual.jpg", utc_timestamp(), "Used", "Book");
```

```
insert into book (itemid, isbn, author, edition) values ((select itemid from item where title =  
"CSS3: Visual QuickStart Guide" and itemowner = "sli"), " 9780321888938", "Jason  
Cranford Teague", 6);
```

```
insert into item (itemowner, universityid, title, description, itemcondition, price, image, date,  
itemtype, special, views) values ((select username from user where username =  
"kasa288"), (select universityid from user where username = "kasa288"), "Naked  
Lunch", "Good Book to read", "Average", 20.00, "nakedlunch.jpg", utc_timestamp(),  
"New", "Book", 3);
```

```
insert into book (itemid, isbn, author, edition) values ((select itemid from item where title =  
"Naked Lunch" and itemowner = "kasa288"), " 9780802122070", "William S.  
Burroughs", 2);
```

```
//auto increment views
```

```
update item set views = views +1 where itemid = 9;
```

```
//get top 5 viewed items
```

```
select itemid, title, image from item order by date desc limit 5;
```

```
//get 5 newest items
```

```
select * from item order by date desc limit 5;
```