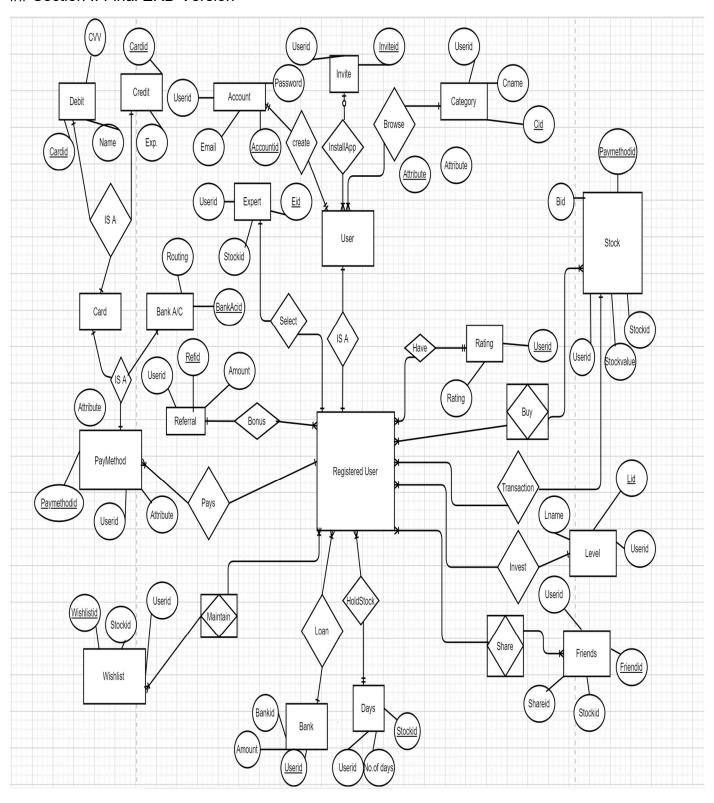
Name: Dipendra Bharati

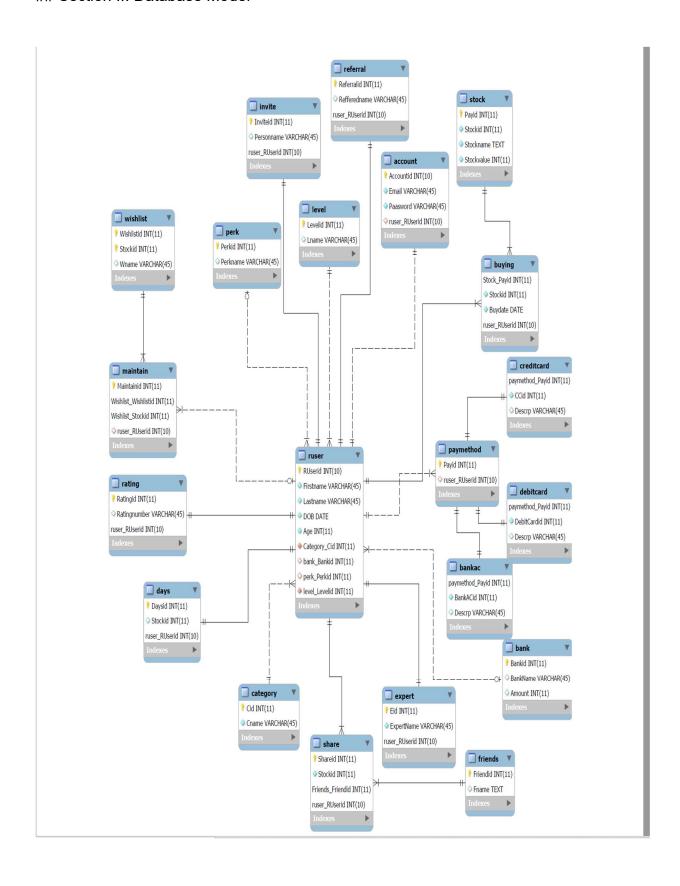
Class: Csc 675

Prof: Jose Ortiz

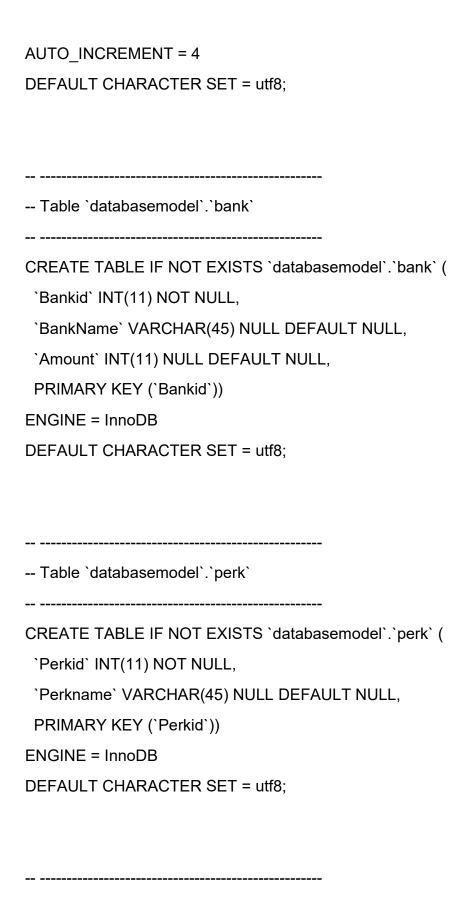
Project: HW2

Section I: Final ERD Version





```
## Section III: Forward Engineering
-- MySQL Workbench Forward Engineering
SET @OLD_UNIQUE_CHECKS=@@UNIQUE_CHECKS, UNIQUE_CHECKS=0;
SET @OLD FOREIGN KEY CHECKS=@@FOREIGN KEY CHECKS,
FOREIGN KEY CHECKS=0;
SET @OLD_SQL_MODE=@@SQL_MODE,
SQL MODE='ONLY_FULL_GROUP_BY,STRICT_TRANS_TABLES,NO_ZERO_IN_D
ATE, NO ZERO DATE, ERROR FOR DIVISION BY ZERO, NO ENGINE SUBSTITU
TION';
-- Schema databasemodel
-- Schema databasemodel
CREATE SCHEMA IF NOT EXISTS 'databasemodel' DEFAULT CHARACTER SET
utf8;
USE 'databasemodel';
-- Table `databasemodel`.`category`
CREATE TABLE IF NOT EXISTS 'databasemodel'. 'category' (
 'Cid' INT(11) NOT NULL,
 `Cname` VARCHAR(45) NOT NULL,
 PRIMARY KEY ('Cid'))
ENGINE = InnoDB
```



```
-- Table `databasemodel`.`level`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'level' (
 `Levelid` INT(11) NOT NULL,
 'Lname' VARCHAR(45) NULL DEFAULT NULL,
 PRIMARY KEY ('Levelid'))
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
-- Table `databasemodel`.`ruser`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'ruser' (
 `RUserid` INT(10) UNSIGNED NOT NULL,
 `Firstname` VARCHAR(45) NOT NULL,
 `Lastname` VARCHAR(45) NOT NULL,
 'DOB' DATE NOT NULL,
 'Age' INT(11) NOT NULL,
 `Category Cid` INT(11) NOT NULL,
 `bank_Bankid` INT(11) NULL,
 `perk_Perkid` INT(11) NULL,
 'level Levelid' INT(11) NOT NULL,
 PRIMARY KEY ('RUserid'),
 INDEX `fk_User_Category1_idx` (`Category_Cid` ASC) VISIBLE,
 INDEX 'fk ruser bank1 idx' ('bank Bankid' ASC) VISIBLE,
 INDEX `fk_ruser_perk1_idx` (`perk_Perkid` ASC) VISIBLE,
 INDEX 'fk ruser level1 idx' ('level Levelid' ASC) VISIBLE,
```

```
CONSTRAINT 'fk User Category1'
  FOREIGN KEY ('Category_Cid')
  REFERENCES 'databasemodel'.'category' ('Cid')
  ON DELETE CASCADE
  ON UPDATE CASCADE,
 CONSTRAINT 'fk ruser bank1'
  FOREIGN KEY ('bank Bankid')
  REFERENCES 'databasemodel'.'bank' ('Bankid')
  ON DELETE SET NULL
  ON UPDATE SET NULL,
 CONSTRAINT 'fk ruser perk1'
  FOREIGN KEY ('perk_Perkid')
  REFERENCES 'databasemodel'.'perk' ('Perkid')
  ON DELETE SET NULL
  ON UPDATE SET NULL,
 CONSTRAINT `fk_ruser_level1`
  FOREIGN KEY ('level Levelid')
  REFERENCES 'databasemodel'.'level' ('Levelid')
  ON DELETE CASCADE
  ON UPDATE CASCADE)
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
-- Table `databasemodel`.`account`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'account' (
```

```
'Accountid' INT(10) UNSIGNED NOT NULL AUTO INCREMENT,
 `Email` VARCHAR(45) NOT NULL,
 `Paasword` VARCHAR(45) NOT NULL,
 `ruser_RUserid` INT(10) UNSIGNED NULL,
 PRIMARY KEY ('Accountid'),
 INDEX 'fk account ruser1 idx' ('ruser RUserid' ASC) VISIBLE,
 CONSTRAINT 'fk account ruser1'
  FOREIGN KEY (`ruser_RUserid`)
  REFERENCES 'databasemodel'.'ruser' ('RUserid')
  ON DELETE SET NULL
  ON UPDATE SET NULL)
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
-- Table `databasemodel`.`paymethod`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'paymethod' (
 'Payid' INT(11) NOT NULL AUTO_INCREMENT,
 `ruser_RUserid` INT(10) UNSIGNED NULL,
 PRIMARY KEY ('Payid'),
 INDEX 'fk paymethod ruser1 idx' ('ruser RUserid' ASC) VISIBLE,
 CONSTRAINT 'fk paymethod ruser1'
  FOREIGN KEY ('ruser RUserid')
  REFERENCES 'databasemodel'.'ruser' ('RUserid')
  ON DELETE SET NULL
  ON UPDATE SET NULL)
```

```
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
-- Table `databasemodel`.`bankac`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'bankac' (
 `paymethod_Payid` INT(11) NOT NULL,
 `BankACid` INT(11) NOT NULL,
 'Descrp' VARCHAR(45) NULL,
 PRIMARY KEY ('paymethod_Payid'),
 INDEX `fk_bankac_paymethod1_idx` (`paymethod_Payid` ASC) VISIBLE,
 CONSTRAINT 'fk bankac paymethod1'
  FOREIGN KEY ('paymethod_Payid')
  REFERENCES `databasemodel`.`paymethod` (`Payid`)
  ON DELETE CASCADE
  ON UPDATE CASCADE)
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
-- Table `databasemodel`.`stock`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'stock' (
 `Payid` INT(11) NOT NULL AUTO_INCREMENT,
 'Stockid' INT(11) NOT NULL,
```

```
`Stockname` TEXT NOT NULL,
 `Stockvalue` INT(11) NOT NULL,
PRIMARY KEY ('Payid'))
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
-- Table `databasemodel`.`buying`
CREATE TABLE IF NOT EXISTS 'databasemodel'. 'buying' (
 `Stock_Payid` INT(11) NOT NULL,
 `Stockid` INT(11) NOT NULL,
 `Buydate` DATE NOT NULL,
 `ruser_RUserid` INT(10) UNSIGNED NOT NULL,
PRIMARY KEY ('Stock_Payid', 'ruser_RUserid'),
INDEX 'fk Buying Stock1 idx' ('Stock Payid' ASC) VISIBLE,
INDEX 'fk buying ruser1 idx' ('ruser RUserid' ASC) VISIBLE,
 CONSTRAINT `fk_Buying_Stock1`
  FOREIGN KEY (`Stock_Payid`)
  REFERENCES 'databasemodel'.'stock' ('Payid')
  ON DELETE CASCADE
  ON UPDATE CASCADE,
 CONSTRAINT 'fk buying ruser1'
  FOREIGN KEY ('ruser RUserid')
  REFERENCES 'databasemodel'.'ruser' ('RUserid')
  ON DELETE CASCADE
  ON UPDATE CASCADE)
```

```
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
-- Table `databasemodel`.`creditcard`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'creditcard' (
 `paymethod_Payid` INT(11) NOT NULL,
 'CCid' INT(11) NOT NULL,
 'Descrp' VARCHAR(45) NULL,
 PRIMARY KEY ('paymethod_Payid'),
 INDEX `fk_creditcard_paymethod1_idx` (`paymethod_Payid` ASC) VISIBLE,
 CONSTRAINT 'fk creditcard paymethod1'
  FOREIGN KEY ('paymethod_Payid')
  REFERENCES `databasemodel`.`paymethod` (`Payid`)
  ON DELETE CASCADE
  ON UPDATE CASCADE)
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
-- Table `databasemodel`.`days`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'days' (
 `Daysid` INT(11) NOT NULL,
 `Stockid` INT(11) NULL DEFAULT NULL,
```

```
`ruser RUserid` INT(10) UNSIGNED NOT NULL,
PRIMARY KEY ('Daysid', 'ruser RUserid'),
INDEX `fk days ruser1 idx` (`ruser RUserid` ASC) VISIBLE,
 CONSTRAINT `fk_days_ruser1`
  FOREIGN KEY ('ruser RUserid')
  REFERENCES 'databasemodel'.'ruser' ('RUserid')
  ON DELETE CASCADE
  ON UPDATE CASCADE)
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
-- Table `databasemodel`.`debitcard`
CREATE TABLE IF NOT EXISTS `databasemodel`.`debitcard` (
 'paymethod Payid' INT(11) NOT NULL,
 `DebitCardid` INT(11) NOT NULL,
 'Descrp' VARCHAR(45) NULL,
PRIMARY KEY ('paymethod Payid'),
INDEX `fk_debitcard_paymethod1_idx` (`paymethod_Payid` ASC) VISIBLE,
 CONSTRAINT `fk debitcard paymethod1`
  FOREIGN KEY ('paymethod Payid')
  REFERENCES `databasemodel`.`paymethod` (`Payid`)
  ON DELETE CASCADE
  ON UPDATE CASCADE)
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
```

```
-- Table `databasemodel`.`expert`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'expert' (
 'Eid' INT(11) NOT NULL AUTO INCREMENT,
 `ExpertName` VARCHAR(45) NOT NULL,
 `ruser_RUserid` INT(10) UNSIGNED NOT NULL,
PRIMARY KEY ('Eid', 'ruser RUserid'),
INDEX 'fk expert ruser1 idx' ('ruser RUserid' ASC) VISIBLE,
 CONSTRAINT `fk_expert_ruser1`
  FOREIGN KEY (`ruser_RUserid`)
  REFERENCES 'databasemodel'.'ruser' ('RUserid')
  ON DELETE CASCADE
  ON UPDATE CASCADE)
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
-- Table `databasemodel`.`friends`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'friends' (
 `Friendid` INT(11) NOT NULL AUTO_INCREMENT,
'Fname' TEXT NULL DEFAULT NULL,
PRIMARY KEY ('Friendid'))
ENGINE = InnoDB
```

DEFAULT CHARACTER SET = utf8;

```
-- Table `databasemodel`.`invite`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'invite' (
 `Inviteid` INT(11) NOT NULL AUTO_INCREMENT,
 'Personname' VARCHAR(45) NULL DEFAULT NULL,
 `ruser_RUserid` INT(10) UNSIGNED NOT NULL,
 PRIMARY KEY ('Inviteid', 'ruser RUserid'),
 INDEX `fk_invite_ruser1_idx` (`ruser_RUserid` ASC) VISIBLE,
 CONSTRAINT 'fk invite ruser1'
  FOREIGN KEY ('ruser RUserid')
  REFERENCES 'databasemodel'.'ruser' ('RUserid')
  ON DELETE CASCADE
  ON UPDATE CASCADE)
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
-- Table `databasemodel`.`wishlist`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'wishlist' (
 'Wishlistid' INT(11) NOT NULL,
 `Stockid` INT(11) NOT NULL,
 `Wname` VARCHAR(45) NULL DEFAULT NULL,
```

```
PRIMARY KEY ('Wishlistid', 'Stockid'))
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
-- Table `databasemodel`.`maintain`
CREATE TABLE IF NOT EXISTS 'databasemodel'. 'maintain' (
 `Maintainid` INT(11) NOT NULL AUTO_INCREMENT,
 'Wishlist Wishlistid' INT(11) NOT NULL,
 `Wishlist_Stockid` INT(11) NOT NULL,
 'ruser RUserid' INT(10) UNSIGNED NULL,
 PRIMARY KEY ('Maintainid', 'Wishlist Wishlistid', 'Wishlist Stockid'),
 INDEX `fk_Maintain_Wishlist1_idx` (`Wishlist_Wishlistid` ASC, `Wishlist_Stockid`
ASC) VISIBLE,
 INDEX 'fk maintain ruser1 idx' ('ruser RUserid' ASC) VISIBLE,
 CONSTRAINT 'fk Maintain Wishlist1'
  FOREIGN KEY ('Wishlist_Wishlistid', 'Wishlist_Stockid')
  REFERENCES 'databasemodel'.'wishlist' ('Wishlistid', 'Stockid')
  ON DELETE CASCADE
  ON UPDATE CASCADE,
 CONSTRAINT 'fk maintain ruser1'
  FOREIGN KEY (`ruser_RUserid`)
  REFERENCES 'databasemodel'.'ruser' ('RUserid')
  ON DELETE CASCADE
  ON UPDATE CASCADE)
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
```

```
-- Table `databasemodel`.`rating`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'rating' (
 `Ratingid` INT(11) NOT NULL,
 `Ratingnumber` VARCHAR(45) NULL DEFAULT NULL,
 `ruser_RUserid` INT(10) UNSIGNED NOT NULL,
 PRIMARY KEY ('Ratingid', 'ruser RUserid'),
INDEX `fk_rating_ruser1_idx` (`ruser_RUserid` ASC) VISIBLE,
 CONSTRAINT `fk_rating_ruser1`
  FOREIGN KEY (`ruser_RUserid`)
  REFERENCES 'databasemodel'.'ruser' ('RUserid')
  ON DELETE CASCADE
  ON UPDATE CASCADE)
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
-- Table `databasemodel`.`referral`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'referral' (
 `Referralid` INT(11) NOT NULL,
 `Refferedname` VARCHAR(45) NULL DEFAULT NULL,
 `ruser_RUserid` INT(10) UNSIGNED NOT NULL,
 PRIMARY KEY ('Referralid', 'ruser_RUserid'),
```

```
INDEX 'fk referral ruser1 idx' ('ruser RUserid' ASC) VISIBLE,
 CONSTRAINT `fk_referral_ruser1`
  FOREIGN KEY ('ruser RUserid')
  REFERENCES `databasemodel`.`ruser` (`RUserid`)
  ON DELETE CASCADE
  ON UPDATE CASCADE)
ENGINE = InnoDB
DEFAULT CHARACTER SET = utf8;
-- Table `databasemodel`.`share`
CREATE TABLE IF NOT EXISTS 'databasemodel'.'share' (
 `Shareid` INT(11) NOT NULL,
 `Stockid` INT(11) NOT NULL,
 `Friends Friendid` INT(11) NOT NULL,
 'ruser RUserid' INT(10) UNSIGNED NOT NULL,
 PRIMARY KEY ('Shareid', 'Friends_Friendid', 'ruser_RUserid'),
 INDEX 'fk Share Friends1 idx' ('Friends Friendid' ASC) VISIBLE,
 INDEX `fk_share_ruser1_idx` (`ruser_RUserid` ASC) VISIBLE,
 CONSTRAINT `fk_Share_Friends1`
  FOREIGN KEY ('Friends Friendid')
  REFERENCES 'databasemodel'.'friends' ('Friendid')
  ON DELETE CASCADE
  ON UPDATE CASCADE,
 CONSTRAINT `fk_share_ruser1`
  FOREIGN KEY ('ruser RUserid')
```

REFERENCES 'databasemodel'.'ruser' ('RUserid')

ON DELETE CASCADE

ON UPDATE CASCADE)

ENGINE = InnoDB

DEFAULT CHARACTER SET = utf8;

SET SQL_MODE=@OLD_SQL_MODE;

SET FOREIGN_KEY_CHECKS=@OLD_FOREIGN_KEY_CHECKS;

SET UNIQUE_CHECKS=@OLD_UNIQUE_CHECKS;

```
INSERT INTO account VALUES(1,'dibsbharati@gmail.com','dibs1234',1);
INSERT INTO account VALUES (2, 'arjun@gmail.com', 'arjun1234', 2);
INSERT INTO account VALUES(3, 'pramish@gmail.com', 'pramish1234', 3);
Insert into bank values (1, 'Bank of America', 5000);
Insert into bank values (2, 'Wells Fargo', 6000);
Insert into bank values (3, 'CitiBank', 7000);
Insert into bankac values (1, 1, 'Bankac');
Insert into bankac values (2, 2, 'Bankac');
Insert into bankac values (3, 3, 'Bankac');
Insert into buying values(1, 1,'2020-03-25', 1);
Insert into buying values(2, 4,'2020-03-24', 1);
Insert into buying values(3, 7, '2020-03-23', 2);
INSERT INTO category VALUES( 1,'Tech');
INSERT INTO category VALUES(2,'Real State');
INSERT INTO category VALUES(3,'Electronics');
Insert into creditcard values (4, 1, 'CC');
Insert into creditcard values (5, 2, 'CC');
Insert into creditcard values (6, 3, 'CC');
Insert into days values(1, 1, 1);
Insert into days values (2, 2, 1);
```

```
Insert into debitcard values(7, 1, 'DC');
Insert into debitcard values (8, 2, 'DC');
Insert into debitcard values (9, 3, 'DC');
Insert into expert values(1, 'John', 1);
Insert into expert values(2, 'Sam', 2);
Insert into expert values(3, 'Harry', 2);
Insert into friends values(1, 'Ryan');
Insert into friends values(2, 'Jose');
Insert into friends values (3, 'Matt');
Insert into invite value(1, 'david', 1);
Insert into invite value (2, 'Leo', 2);
Insert into invite value (3, 'cristiano', 2);
Insert into level values (1, 'Begineer');
Insert into level values (2, 'Competent');
Insert into level values (3, 'Pro');
Insert into maintain values (1, 1, 1, 1);
Insert into maintain values (1, 1, 2, 2);
Insert into maintain values (1, 2, 1, 3);
Insert into paymethod values (1, 1);
```

Insert into days values (3, 2, 2);

```
Insert into paymethod values (2, 1);
Insert into paymethod values (3, 1);
Insert into paymethod values (4, 2);
Insert into paymethod values (5, 2);
Insert into paymethod values (6, 2);
Insert into paymethod values (7, 3);
Insert into paymethod values (8, 3);
Insert into paymethod values (9, 3);
Insert into perk values (1, 'Free Meals');
Insert into perk values (2, 'Movie tickets');
Insert into perk values (3, 'Disneyland ticket');
Insert into rating values(1, 'One', 1);
Insert into rating values(2, 'Two', 2);
Insert into rating values(3, 'Three', 3);
Insert into referral values(1, 'Mike', 1);
Insert into referral values(2, 'Peter', 1);
Insert into referral values(3, 'Ben', 1);
INSERT INTO ruser VALUES (1,'dibs', 'bharati', '1996-05-27', 24, 1, 1, 1, 1);
INSERT INTO ruser VALUES (2, 'arjun', 'Bista', '1996-06-28', 25, 1, 1, 1, 1);
INSERT INTO ruser Values (3, 'pramish', 'Dhakal', '1996-07-29', 26, 1, 1, 1, 1);
Insert into share values(1, 1, 1, 1);
```

```
Insert into share values(1, 1, 2, 1);
Insert into share values(2, 1, 3, 1);
Insert into stock value (1, 'Microsoft', 100, 1);
Insert into stock value (2, 'Tesla', 200, 2);
Insert into stock value (2, 'Tesla', 200, 3);
Insert into wishlist values(1, 1, 'Mywish');
Insert into wishlist values (1, 2, 'Mywish');
Insert into wishlist values (2, 1, 'Bestwish');
```

```
## Section V: Testing
delete from account where Accountid=2;
update account set email='nayan@gmail.com' where Accountid=3;
select * from account;
delete from bank where Bankid=2;
update bank set BankName= 'Chase' where Bankid=3;
select * from bank;
delete from buying where Buydate= 2020-05-23;
update buying set Buydate=2020-05-26 where Stock Payid=3;
select * from buying;
delete from category where Cname='Electronics';
update category set Cname='sports' where Cid=2;
select * from category;
delete from days where Daysid=1;
Update days set stockid=4 where Daysid=2;
select * from days;
delete from expert where ExpertName='Sam';
update expert set ExpertName='Mike' where Eid=3;
select * from expert;
delete from friends where Fname= 'Matt';
update friends set Fname='Dave' where Friendid=1;
select * from friends;
```

```
delete from invite where Personname = 'cristiano';
update friends set Personname = 'Neymar' where Inviteid=2;
select * from invite;
delete from level where Lname='Competent';
update level set Lname='Extreme' where Levelid=3;
select * from level;
delete from paymethod where Payid=4;
update paymethod set ruser RUserid=3 where Payid=1;
select * from paymethod;
delete from perk where Perkname= 'free';
update perk set Perkname= 'skydive tickets' where Perkid=2;
select * from perk;
delete from rating where Ratingnumber='Two';
update rating set Ratingnumber='Five' where Ratingid=2;
select * from rating;
delete from referral where Refferedname='Peter';
update referral set Refferedname ='Joshua' where Referralid=2;
select * from referral;
delete from ruser where Firstname='Pramish';
update ruser set Lastname='Dangi' where RUserid=2;
select * from ruser;
```

```
delete from ruser where Firstname='Pramish';
update ruser set Lastname='Dangi' where RUserid=2;
select * from ruser;

delete from share where Shareid=2;
update share set Stockid=2 where Shareid=1;
select * from share;
```

Section VI: Testing Table

Test	Statement	Entity	Pass/Fail	Error Description	
			-		
1	Delete	account	Pass	None	
	11		D	Nama	
	Update	account	Pass	None	
	Select	account	Pass	None	
2	Delete	bank	Pass	None	
	Update	bank	Pass	None	
	Select	bank	Pass	None	
3	Delete	buying	Fail	Cannot delete a parent row; foreign key constraint fails.	
	Update	buying	Pass	None	
	Select	buying	Pass	None	
4	Delete	category	Fail	Cannot delete a parent row; foreign key constraint fails.	
	Update	category	Pass	None	
	Select	category	Pass	None	
5	Delete	days	Pass	None None	
	Update	days	Pass		
	Select	days	Pass	None	
6	Delete	expert	Pass	None	
	Update	expert	Pass	None	
	Select	expert	Pass	None	
7	Delete	invite	Fail	You tried to update a table without a where that uses a key column	
	Update	invite	Fail	Unknown column "Inviteid" in where clause	
	Select	invite	Pass	None	

		I			
8	Delete	level	Pass	None	
	Update	level	Pass	None	
	Select	level	Pass	None	
9	Delete	maintain	Pass	None	
	Update	maintain	Pass	None	
	Select	maintain	Pass	None Cannot delete a parent row; foreign key	
10	Delete	paymethod	Fails	constraint fails. Cannot delete a parent row; foreign key	
	Update	paymethod	Fails	constraint fails.	
	Select	paymethod	Pass	None	
11	Delete	perk	Pass	None	
	Update	perk	Pass	None	
	Select	perk	Pass	None	
12	Delete	rating	Pass	None	
	Update	rating	Pass	None	
	Select	rating	Pass	None	
13	Delete	referral	Pass	None	
	Update	referral	Pass	None	
	Select	rating	Pass	None	
14	Delete	ruser	Fail	Cannot delete a parent row; foreign key constraint fails.	
	Update	ruser	Pass	None	
	Select	ruser	Pass	None	
15	Delete	share	Pass	None	
	Update	share	Pass	None	