



Green University of Bangladesh
Department of Computer Science and Engineering(CSE)
Faculty of Sciences and Engineering
Semester: (Summer, Year:2021), B.Sc. in CSE (Day)

CLP: 03

Course Title: Database System lab

Course Code: CSE-210

Section:193DB

Lab Experiment Name: Implementation of Integrity constraints in MySQL(Primary Key, Composite Key, Unique, Foreign Key)

Student Details

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Submission Date : 02.09.2021

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//create customer table

```
CREATE TABLE customer(  
    c_name varchar(20) PRIMARY KEY,  
    city varchar(20)  
);
```

//create branch table

```
CREATE TABLE branch(  
    branch_id bigint(20) PRIMARY KEY NOT NULL,  
    branch_name varchar(20) NOT NULL UNIQUE,  
    branch_city varchar(20)  
);
```

//create account table

```
CREATE TABLE account(  
    acc_num bigint(20) NOT NULL UNIQUE PRIMARY KEY,  
    branch_name varchar(20) NOT NULL,  
    balance integer(20),  
    FOREIGN KEY (branch_name) REFERENCES branch(branch_name)  
);
```

//create depositor table

```
CREATE TABLE depositor(  
    c_name varchar(20) NOT NULL UNIQUE PRIMARY KEY,  
    acc_num bigint(20),  
    FOREIGN KEY (acc_num) REFERENCES account(acc_num),  
    FOREIGN KEY (c_name) REFERENCES customer(c_name)  
);
```

//create loan table

```
CREATE TABLE loan(  
    loan_num bigint(20) PRIMARY KEY UNIQUE,  
    branch_name varchar(20),  
    amount int,  
    FOREIGN KEY (branch_name) REFERENCES branch(branch_name)  
);
```

//create borrower table

```
CREATE TABLE borrower(  
    name varchar(20) PRIMARY KEY,  
    loan_num bigint(20),  
    FOREIGN KEY (loan_num) REFERENCES loan(loan_num)  
);
```

Customer:

```
INSERT INTO customer (c_name,city) VALUES ("jakir","Dhaka");
```

```
INSERT INTO customer (c_name,city) VALUES ("sakib","jamalpur");
```

```
INSERT INTO branch (branch_id,branch_name,branch_city) VALUES (1,"Dhaka Branch","Dhaka")
```

```
INSERT INTO account (acc_num,branch_name,balance) VALUES (1,"Dhaka Branch",100)
```

```
INSERT INTO depositor (c_name, acc_num) VALUES ("jakir",1)
```

```
INSERT INTO branch (branch_id,branch_name,branch_city) VALUES (1,"Dhaka Branch","Dhaka")
```

```
INSERT INTO loan (loan_num,branch_name,amount) VALUES (1,"Dhaka Branch",100)
```

```
INSERT INTO borrower (name, loan_num) VALUES ("borrower one",1)
```

```
select loan-number  
from loan  
where branch-name = "Perryridge" and amount > 1200
```

```
set @all_ammount = SELECT (amount) FROM loan
```

```
SELECT MAX(amount) as max_amount FROM loan WHERE amount > @all_ammount
```

```
select c_name  
from customer  
where c_name LIKE '%ot' OR c_name LIKE 'ot%'
```

```
ALTER TABLE depositor RENAME TO depostror
```

```
set @average = SELECT AVG(balance) FROM account  
delete from account where balance < @average
```