

DDL create:

```
create table City (
```

CityName	varchar(50)	NOT NULL,
----------	-------------	-----------

CityID	int	NOT NULL,
--------	-----	-----------

DistrictName	varchar(50)	NOT NULL,
--------------	-------------	-----------

constraint	City_PK	primary key(CityID)
------------	---------	----------------------

```
);
```

```
create table JoAnneStore (
```

StoreName	varchar(50)	NOT NULL,
-----------	-------------	-----------

StoreManager	varchar(50)	NOT NULL,
--------------	-------------	-----------

StoreRevenue	int	NOT NULL,
--------------	-----	-----------

CityID	int	NOT NULL,
--------	-----	-----------

constraint	JAS_PK	primary key	(StoreName, CityID),
------------	--------	-------------	----------------------

constraint	JAS_FK	foreign key	(CityID) references City(CityID)
------------	--------	-------------	------------------------------------

```
);
```

DDL insert:

```
INSERT INTO City(City_ID, District_name, City_name) VALUES
```

```
(1, 'South Bay', 'Torrance'),
```

```
(2, 'South Bay', 'Redondo Beach'),
```

```
(3, 'Los Angeles', 'Long Beach'),
```

```
(4, 'Los Angeles', 'Lakewood');
```

```
INSERT INTO JoAnneStore(storeName, storeManager, storeRevenue, cityID) VALUES
```

```
('Palo Verde', 'Eliza Doolittle', 500005.82, 1 ),
```

```
('Towne Center', 'Milly Cyrus', 382234.88, 1),
```

```
('Fashion Center', 'David Duchovny', 128000.83, 2),
```

```
('South Mall', 'Michael J. Fox', 512384, 2),  
('Signal Hill', 'Brayan', 213412.45, 3),  
('El Dorado', 'Hunter Lewis', 89034900.23, 4);
```

Stored Procedure:

```
CREATE DEFINER='cecs323sus19'@'10.10.10.10' PROCEDURE `store_district`(IN newStore varchar(25), IN  
newCityID INT)
```

```
BEGIN
```

```
    DECLARE storeExist varchar(25);
```

```
    SELECT DISTINCT storeName INTO storeExist FROM joannestore INNER JOIN city ON  
joannestore.cityID = city.cityID
```

```
    WHERE storeName = newStore AND city.districtName =
```

```
        (SELECT districtName FROM city WHERE cityID = newCityID );
```

```
    if storeExist is not null then
```

```
        signal sqlstate '45000'
```

```
        set message_text='The store\'s name has already existed within the district';
```

```
    end if;
```

```
END
```

Triggers:

```
CREATE DEFINER='cecs323sus19'@'10.10.10.10' TRIGGER `joannestore_BEFORE_INSERT` BEFORE INSERT ON  
`joannestore` FOR EACH ROW BEGIN
```

```
    call store_district(new.storeName, new.cityID);
```

```
END
```

```
CREATE DEFINER='cecs323sus19'@'10.10.10.10' TRIGGER `joannestore_BEFORE_UPDATE` BEFORE UPDATE ON  
`joannestore` FOR EACH ROW BEGIN
```

```
    call store_district(new.storeName, new.cityID);
```

```
END
```

Trigger Demonstration:

Data before trigger:

	CityName	CityID	DistrictName
▶	Torrance	1	South Bay
	Redondo Beach	2	South Bay
	Long Beach	3	Los Angeles
	Lakewood	4	Los Angeles
*	NULL	NULL	NULL

	StoreName	StoreManager	StoreRevenue	CityID
▶	El Dorado	Hunter Lewis	89034900	4
	Fashion Center	David Duchovny	128001	2
	Palo Verde	Eliza Doolittle	500006	1
	Signal Hill	Brayan	213412	3
	South Mall	Michael J. Fox	512384	2
	Towne Center	Milly Cyrus	382235	1
*	NULL	NULL	NULL	NULL

Test:

```
INSERT INTO JoAnneStore(storeName, storeManager, storeRevenue, cityID) VALUES  
('Palo Verde', 'Brayan Fuentes', 500005.82, 2);
```

Result:

77 16:31:03 INSERT INTO JoAnneStore(storeName, storeManager, storeRevenue, cityID) VALUES ('Palo Verde', 'Br... Error Code: 1644. The store's name has already existed within the district

0.063 sec