DDL:

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)  
)

INSERTS:

INSERT INTO City(CityID, DistrictName, CityName) 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', 'Alexis Leonard', 214896.31, 1 ),  
('Towne Center', 'Kurt Todd', 214963.88, 1),  
('Fashion Center', 'Moses Cross', 214896.34, 2),  
('South Mall', 'Gwendolyn Kelley', 214786, 2),  
('Signal Hill', 'Jean Daniels', 845632.45, 3),  
('El Dorado', 'Kelly Pena', 85621479.54, 4);

Stored Procedure:

CREATE DEFINER= CECS3232021FallS06N20s@`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

Trigger:

CREATE DEFINER= CECS3232021FallS06N20s@`10.%` TRIGGER `joannestore\_BEFORE\_INSERT` BEFORE INSERT ON  
`joannestore` FOR EACH ROW BEGIN  
call *store\_district*(new.storeName, new.cityID);  
END

CREATE DEFINER= CECS3232021FallS06N20s@`10.%` TRIGGER `joannestore\_BEFORE\_UPDATE` BEFORE UPDATE ON  
`joannestore` FOR EACH ROW BEGIN  
call *store\_district*(new.storeName, new.cityID);  
END

Demonstration before triggers:

A screenshot of a computer

Description automatically generated with medium confidence

Graphical user interface, application

Description automatically generated

Test:

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

INSERT INTO JoAnneStore(storeName, storeManager, storeRevenue, cityID) VALUES  
('Fashion Center', 'Yuvika Nibber', 548796.82, 3);

INSERT INTO JoAnneStore(storeName, storeManager, storeRevenue, cityID) VALUES  
('Palo Verde', 'Yuvika Nibber', 548796.82, 3);

Error and Demonstration after triggers:

[2021-11-10 09:18:42] [45000][1644] The store's name has already existed within the district

A screenshot of a computer

Description automatically generated with medium confidence

A screenshot of a computer

Description automatically generated with medium confidence