**SQL Task**

First I created the database and three tables in MySQL so that I could run the required SQL command to generate what was being asked for by the task. Below is the SQL I created to create the database and three tables. Page 2 shows (below) shows the SQL script I developed to get the footfall per premise, and the output from running the SQL script.

# create DB

***CREATE DATABASE ldcDB;***

# connect to ldcDB database

***USE ldcDB;***

# create Businesses Table

***CREATE TABLE Businesses (***

***id INT NOT NULL,***

***Business VARCHAR(255) NOT NULL,***

***PRIMARY KEY (id)***

***);***

# insert values into Businesses Table

***INSERT INTO Businesses (id, Business) VALUES (10000022, 'PizzaExpress');***

***INSERT INTO Businesses (id, Business) VALUES (10000024, 'Holland & Barret');***

***INSERT INTO Businesses (id, Business) VALUES (10000025, 'Cafe Rouge');***

***INSERT INTO Businesses (id, Business) VALUES (10000026, 'Lloyds TSB');***

***INSERT INTO Businesses (id, Business) VALUES (10000028, 'Ernest Jones');***

***INSERT INTO Businesses (id, Business) VALUES (10000029, 'Boots The Chemist');***

***INSERT INTO Businesses (id, Business) VALUES (10000031, 'HSBC');***

***INSERT INTO Businesses (id, Business) VALUES (10000032, 'The Body Shop');***

***INSERT INTO Businesses (id, Business) VALUES (10000033, 'ABC Pharmacy');***

***INSERT INTO Businesses (id, Business) VALUES (10000034, 'Oxfam');***

# drop Businesses Table

***DROP TABLE Businesses;***

# Select all from Businesses Table

***SELECT \* FROM Businesses;***

# create Premises Table

***CREATE TABLE Premises (***

***id INT NOT NULL,***

***Street VARCHAR(255) NOT NULL,***

***PostCode VARCHAR(255) NOT NULL,***

***StreetNo VARCHAR(255),***

***BusinessId INT NOT NULL,***

***PRIMARY KEY (id),***

***FOREIGN KEY (BusinessId) REFERENCES Businesses(id)***

***);***

# insert values into Premises Table

***INSERT INTO Premises (id, Street, PostCode, StreetNo, BusinessId) VALUES (8016, 'Portobello Road', 'W11 2DY', '79', 10000025);***

***INSERT INTO Premises (id, Street, PostCode, StreetNo, BusinessId) VALUES (4920, 'Kendal Street', 'W2 2AW', NULL, 10000034);***

***INSERT INTO Premises (id, Street, PostCode, StreetNo, BusinessId) VALUES (2285, 'Earls Court Road', 'W8 6EA', '10', 10000029);***

***INSERT INTO Premises (id, Street, PostCode, StreetNo, BusinessId) VALUES (3859, 'Glenburnie Road', 'SW17 7PJ', '15a', 10000024);***

***INSERT INTO Premises (id, Street, PostCode, StreetNo, BusinessId) VALUES (9484, 'Mere Street', 'IP22 4AD', '6', 10000026);***

***INSERT INTO Premises (id, Street, PostCode, StreetNo, BusinessId) VALUES (1839, 'Commercial Road', 'NG6 8HA', '16', 10000032);***

***INSERT INTO Premises (id, Street, PostCode, StreetNo, BusinessId) VALUES (4837, 'Wilmslow Road', 'M20 3BW', '432-434', 10000031);***

***INSERT INTO Premises (id, Street, PostCode, StreetNo, BusinessId) VALUES (2958, 'Edgware Road', 'W2 1ET', '62-64', 10000028);***

***INSERT INTO Premises (id, Street, PostCode, StreetNo, BusinessId) VALUES (2020, 'York Road', 'TS26 9EN', NULL, 10000022);***

***INSERT INTO Premises (id, Street, PostCode, StreetNo, BusinessId) VALUES (5472, 'Preston Road', 'BN1 4QF', NULL, 10000033);***

# drop Premises Table

***DROP TABLE Premises;***

# Select all from Premises Table

***SELECT \* FROM Premises;***

# create Footfall Table

***CREATE TABLE Footfall (***

***WeekNo INT NOT NULL,***

***PremisesId INT NOT NULL,***

***Count INT NOT NULL,***

***FOREIGN KEY (PremisesId) REFERENCES Premises(id)***

***);***

# insert values into Footfall Table

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (32, 8016, 382);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (32, 4920, 182);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (32, 2285, 948);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (32, 3859, 272);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (32, 1839, 272);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (32, 4837, 494);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (32, 2958, 220);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (32, 2020, 181);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (32, 5472, 282);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (33, 8016, 494);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (33, 4920, 282);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (33, 2285, 952);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (33, 3859, 282);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (33, 9484, 383);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (33, 1839, 181);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (33, 4837, 285);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (33, 2958, 494);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (33, 2020, 289);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (33, 5472, 939);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (34, 8016, 821);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (34, 4920, 712);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (34, 2285, 284);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (34, 3859, 595);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (34, 1839, 595);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (34, 4837, 181);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (34, 2958, 959);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (34, 2020, 484);***

***INSERT INTO Footfall (WeekNo, PremisesId, Count) VALUES (34, 5472, 817);***

# Select all from Footfall Table

***SELECT \* FROM Footfall;***

**ANSWER:-**

# join tables to get footfall per premises

***SELECT b.Business, ifnull(p.StreetNo, '') as StreetNo, p.Street, p.PostCode, SUM(f.Count) as FootfallCount***

***FROM Businesses as b***

***INNER JOIN Premises as p ON b.id = p.BusinessId***

***INNER JOIN Footfall as f ON p.id = f.PremisesId***

***group by b.Business, StreetNo, p.Street, p.PostCode;***

See output from running script:

