**Q1. The average and sum of the donation by day, month, and year**

**Code:**

-- Create donations by month, average donation and sum of donations for June

CREATE PROCEDURE DonationsbyDateCity

AS

BEGIN

SELECT

A.city,

DATEPART(YEAR, D.donation\_date) AS Year,

DATEPART(MONTH, D.donation\_date) AS Month,

AVG(CAST(D.donation\_amount AS DECIMAL)) AS avg\_donation,

SUM(CAST(D.donation\_amount AS DECIMAL)) AS sum\_donation

FROM Donation AS D

JOIN Address AS A ON D.addressID = A.addressID

GROUP BY

A.city,

DATEPART(YEAR, D.donation\_date),

DATEPART(MONTH, D.donation\_date);

END

EXEC DonationsbyDateCity;

-- Create the stored procedure and name; parameters are city and month, can be selected in execution line

-- Calculate the average and sum of donations by day, month, and year

-- USE DATEPART FUNCTION FOR EASIER READABILITY AND TO EXTRACT COMPONENTS OF DATE COLUMN FOR TABLE

CREATE PROCEDURE totaldonationavgsum (@city NVARCHAR(100), @month INT)

AS

BEGIN

SELECT

DATEPART(YEAR, d.donation\_date) AS Year,

DATEPART(MONTH, d.donation\_date) AS Month,

DATEPART(DAY, d.donation\_date) AS Day,

AVG(CAST(d.donation\_amount AS decimal)) AS avg\_donation,

SUM(CAST(d.donation\_amount AS decimal)) AS sum\_donation

FROM Donation d

INNER JOIN Address a ON d.addressID = a.addressID

WHERE

DATEPART(MONTH, d.donation\_date) = @month AND

a.city = @city

GROUP BY

DATEPART(YEAR, d.donation\_date),

DATEPART(MONTH, d.donation\_date),

DATEPART(DAY, d.donation\_date)

END

EXEC totaldonationavgsum 'Toronto', 6

EXEC totaldonationavgsum 'Vancouver', 6

Q2: The average and sum of the donations by postal code and City in a specific month. define the city and month as variables to allow flexibility. **(Trung)**

-- Average and sum of donations by postal code and city in a specific month

CREATE PROCEDURE [dbo].[DonationbyCityPostalCodeDate]

@city VARCHAR(100),

@month INT

AS

BEGIN

SELECT

a.city,

a.postal\_code,

AVG(CAST(d.donation\_amount AS DECIMAL)) AS avg\_donation,

SUM(CAST(d.donation\_amount AS DECIMAL)) AS sum\_donation

FROM Donation AS d

INNER JOIN Address AS a ON d.addressID = a.addressID

WHERE

a.city = @city

AND DATEPART(MONTH, d.donation\_date) = @month

GROUP BY a.city, a.postal\_code;

END

EXEC DonationbyCityPostalCodeDate @city = 'Toronto', @month = 6;

EXEC DonationbyCityPostalCodeDate @city = 'Vancouver', @month = 6;