

## Assignment 2 – Stored Procedures

Using the Covid Database (MS SQL Backend) that you created earlier in the class, perform the following tasks:

### Part 1 – DDL (10 pts)

- a. Create a [Vitals] table that includes a link to the [Patient] Table, the [Vitals] table should include the following data:
  - i. Patient Id
  - ii. VitalsTypeld
  - iii. VitalsDT
  - iv. VitalsValue
- b. Insert the following patients into your Patient table
  1. James Brown
    - i. Name: James Brown
    - ii. HCN: 757234587
  2. Marvin Gaye
    - iii. Name: Marvin Gaye
    - iv. HCN: 75777761
- c. Create a table named [VitalsType] and include the following data:
  - i. VitalsTypeld
  - ii. VitalsTypeName
- d. Insert Into [VitalsType] the following values  

```
INSERT INTO VitalsType VALUES(1, 'HR');  
INSERT INTO VitalsType VALUES(2, 'Temp');  
INSERT INTO VitalsType VALUES(3, 'MAP');  
INSERT INTO VitalsType VALUES(4, 'SBP');  
INSERT INTO VitalsType VALUES(5, 'DBP');
```

### Part 2 – Stored Proc (15 pts)

Create a stored procedure that:

1. Checks to make sure that a [Vitals] Table exists and if not then create it (2pts)  
Hint use:

```
IF NOT EXISTS(SELECT [name] FROM sys.tables WHERE [name] = 'TableName')  
BEGIN  
CREATE TABLE [dbo].[TableName](  
    ...  
)  
END
```

2. INSERTS the following Info into the [Vitals] table ( 3pts)

Patient	Date	HR	Temp	SBP	DBP
James Brown	01-Jan-20	85	36.1	134	91
Marvin Gaye	02-Jan-20	67	37.5	145	87
James Brown	03-Jan-20	81	38.1	154	97
Marvin Gaye	04-Jan-20	72	37.5	157	88

3. Update the [MAP] column in the [Vitals] table based on the following formula (3pts):  
$$\text{MAP} = (\text{SBP} + 2 * (\text{DBP})) / 3$$
4. Using a Cursor loop through the [Vitals] table and print out the PatientName and the MAP for each day, sorted by Patient Name and Date (5pts)
5. Please ensure your code has a TRY/CATCH/THROW block (2pt)

Please submit your sql script with Part 1 and 2 included in a single file to BrightSpace.

The assignment is due on Friday, 12 March 2021 at midnight.