# IST769 Homework Submission Template

## Basic Information

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Date Due: February 6th, 2020  
Homework #: HW02

## Instructions

For each answer, please include your answer as text, and any screenshot(s) which demonstrate your answer was executed. Most importantly, make sure to include evidence your answer is correct. This will most likely be a screenshot. If you had issues, problems, or had to make assumptions include them in your answer.

## Your Answers:

1.

**Code:**

-- Question one

SELECT product\_id AS [Product ID],

product\_name AS [Product Name],

TRIM(ISNULL(REVERSE(LEFT(REVERSE(product\_name),

NULLIF(CHARINDEX(' ', REVERSE(product\_name)), 0))), product\_name)) AS [Product category],

product\_department AS [Product Department]

FROM fudgemart\_products

**Screenshot of Results:**

A screenshot of a cell phone

Description automatically generated

2.

**Code:**

-- Question two

IF EXISTS (SELECT \* FROM sys.objects WHERE NAME = 'f\_total\_vendor\_sales')

DROP FUNCTION f\_total\_vendor\_sales

GO

CREATE FUNCTION f\_total\_vendor\_sales (@vendor\_id int)

RETURNS TABLE AS

RETURN(

SELECT v.vendor\_name AS [Vendor Name],

re.ID AS [Vendor ID],

re.sales AS [Total SaLes]

FROM fudgemart\_vendors v, (SELECT p.product\_vendor\_id AS [ID], sum(p.product\_wholesale\_price \* o.order\_qty) AS [sales]

FROM fudgemart\_products p, fudgemart\_order\_details o, fudgemart\_vendors v

WHERE o.product\_id = p.product\_id AND p.product\_vendor\_id = v.vendor\_id

GROUP BY p.product\_vendor\_id) re

WHERE v.vendor\_id = re.ID AND v.vendor\_id = @vendor\_id)

GO

-- checking the result

DECLARE @id INT = 1;

WHILE @id < 11

BEGIN

SELECT \* FROM f\_total\_vendor\_sales(@id)

SET @id = @id + 1;

END;

PRINT 'end of loop';

GO

**Screenshot of Result:**

**After creating the function, a loop has been executed to call the function in order to iterate all the vendors.**

**A screenshot of a social media post

Description automatically generated**

3.

**Code:**

-- Question three

USE fudgemart\_v3

IF exists (SELECT \* FROM sys.objects WHERE name = 'p\_write\_vendor')

DROP PROCEDURE p\_write\_vendor

GO

CREATE PROCEDURE p\_write\_vendor(

@name VARCHAR(50),

@phone VARCHAR(20),

@website VARCHAR(1000))

AS BEGIN

IF (SELECT count(\*) FROM fudgemart\_vendors WHERE LOWER(vendor\_name) = LOWER(@name)) = 1

BEGIN

UPDATE fudgemart\_vendors

SET vendor\_phone= @phone, vendor\_website = @website

WHERE LOWER(vendor\_name) = LOWER(@name);

PRINT 'Vendor information has been updated!'

END

ELSE

BEGIN

INSERT INTO fudgemart\_vendors (vendor\_name, vendor\_phone, vendor\_website)

VALUES (@name, @phone, @website)

PRINT 'Vendor information has been inserted!'

END

END

-- checking the result

EXECUTE p\_write\_vendor @name = 'stanless', @phone = '555-9920', @website = 'http://test.com'

EXECUTE p\_write\_vendor @name = 'test', @phone = 'test', @website = 'test'

**Screenshot of Result:**

**A screenshot of a cell phone

Description automatically generated**

**The result of creating a new vendor:A screenshot of a social media post

Description automatically generated**

**Try the procedure and change the created vendor information.**

**Procedure executed successfully.**

**A screenshot of a social media post

Description automatically generated**

**Verified the result.**

**Besides, by using the isnull() function, one can update the information without declaring website variable, which making it optional.**

**A screenshot of a social media post

Description automatically generated**

4.

**Code:**

-- Qestion four

IF EXISTS (SELECT \* FROM sys.objects WHERE name = 'v\_fudgemart\_create\_category')

DROP VIEW v\_fudgemart\_create\_category

GO

CREATE VIEW v\_fudgemart\_create\_category

AS

SELECT product\_id AS [Product ID],

product\_name AS [Product Name],

TRIM(ISNULL(REVERSE(LEFT(REVERSE(product\_name),

NULLIF(CHARINDEX(' ', REVERSE(product\_name)), 0))), product\_name)) AS [Product category],

product\_department AS [Product Department]

FROM fudgemart\_products

GO

SELECT \* FROM v\_fudgemart\_create\_category

**Screenshot of Result:**

**A screenshot of a social media post

Description automatically generated**

5.

**Code:**

-- Question five

IF EXISTS (SELECT \* FROM sys.objects WHERE name = 'f\_employee\_timesheets')

DROP FUNCTION f\_employee\_timesheets

GO

CREATE FUNCTION f\_employee\_timesheets(@eid INT)

RETURNS TABLE AS

RETURN(

SELECT t.timesheet\_employee\_id AS [ID],

CONCAT(e.employee\_firstname, ' ', e.employee\_lastname) AS [Name],

e.employee\_department,

t.timesheet\_payrolldate,

t.timesheet\_hourlyrate, t.timesheet\_hours,

CAST(t.timesheet\_hours \* t.timesheet\_hourlyrate AS money) AS [Gross Pay]

FROM fudgemart\_employee\_timesheets t, fudgemart\_employees e

WHERE e.employee\_id = t.timesheet\_employee\_id AND e.employee\_id = @eid

)

GO

DECLARE @eid INT = 1;

SELECT \* FROM f\_employee\_timesheets(@eid)

**Screenshot of Result:**

A screenshot of text

Description automatically generated

## Student Reflection:

To achieve the highest grade on the assignment you must be as descriptive and personal as possible with your reflection. Ask yourself the following questions.

1. What new information have I learned from completing this assignment? The content of building function, procedure, and view.
2. What were my challenges / roadblocks I encountered on the way to completing it? The question is ambiguous.
3. To be better prepared to attempt this assignment I should \_\_\_\_listen lecture carefully and watch the video\_\_\_ ?
4. If I could make this assignment better, I would \_\_\_\_\_?  
   Do extra online research work
5. Rate your comfort level with completing this assignment: 1

1 ==> I can do this on my own and explain how to do it.

2 ==> I can do this on my own without any help.

3 ==> I can do this with help or guidance from others. If you choose this level, please list those who helped you.

4 ==> I don't understand this at all yet and need extra help. If you choose this, please try to articulate that which you do not understand.