**Step 7:**

**Part A: Simple Views**

**a) Creation of View PhoneBook60**

use PI60;

GO

Create view PhoneBook60 as

select E.Name,D.DeptID,D.DeptName,D.Phone from Employee as E JOIN Department as D ON E.DeptID = D.DeptID;

Commands completed successfully.

**b) Query against the view to show full output and result.**

GO

select \* from PhoneBook60;

Name DeptID DeptName Phone

------------------------- ------ ------------------------- ------------

Prem Chand UENG Urban Engr 555-1234

Joe Cool HEAT HVAC Engr 555-3333

Bill Builder CE Civil Engr 555-2323

John Dough UENG Urban Engr 555-1234

Mary Smith UENG Urban Engr 555-1234

Sam Supervisor ADMN Administation 555-2222

Mary Manager CUST Cust Service 800-555-5555

Mark Black CUST Cust Service 800-555-5555

Matt Lite EE Electrical Engr 555-1212

Fred Sparks EE Electrical Engr 555-1212

(10 rows affected)

**c) Query against the view showing only phone numbers for those in Urban Engr department.**

GO

select PhoneBook60.Name,PhoneBook60.Phone from PhoneBook60 where PhoneBook60.DeptName = 'Urban Engr';

Name Phone

------------------------- ------------

Prem Chand 555-1234

John Dough 555-1234

Mary Smith 555-1234

(3 rows affected)

**Part B: Trigger**

**Create trigger**

GO

Create trigger MaxCost60 ON Project

for INSERT

AS

IF((select inserted.EstimatedCost from inserted) >=3000000)

BEGIN

RAISERROR('Estimated cost of project should not exceed 3 million, NN=60',16,1);

ROLLBACK TRANSACTION;

BEGIN TRANSACTION;

END;

Commands completed successfully.

**CASE 1: Tried to insert project with estimated cost more than 3 million.**

GO

INSERT INTO Project Values(60,'sample project',3999999);

Msg 50000, Level 16, State 1, Procedure MaxCost60, Line 6 [Batch Start Line 25]

Estimated cost of project should not exceed 3 million, NN=60

(1 row affected)

select \* from Project;

Project# ProjectDescription EstimatedCost

----------- ------------------------- ---------------------

22 Roundabout Design 30000.00

24 Street Lights 120000.00

35 Rehab City Hall 500000.00

42 Replace gas lines 1500000.00

55 Roundabout Design 45000.00

100 Flood Control 25000000.00

(6 rows affected)

**CASE 2: Tried to insert project with estimated cost less than 3 million.**

INSERT INTO Project Values(60,'sample project',2999999);

(1 row affected)

select \* from Project;

Project# ProjectDescription EstimatedCost

----------- ------------------------- ---------------------

22 Roundabout Design 30000.00

24 Street Lights 120000.00

35 Rehab City Hall 500000.00

42 Replace gas lines 1500000.00

55 Roundabout Design 45000.00

60 sample project 2999999.00

100 Flood Control 25000000.00

(7 rows affected)

**\*deleted the record “60, sample project,2999999.0” to recover original data.**

**PART C: Stored Procedure**

**Create Stored Procedure**

GO

CREATE PROCEDURE usp\_DeptInfo60

@EmpId int

AS

SET NOCOUNT ON;

Select E.Name,D.DeptName,E.JobTitle from Employee as E JOIN Department as D ON E.DeptID=D.DeptID where E.Emp#=@EmpId;

Commands completed successfully.

**Usage of Procedure usp\_DeptInfo60**

GO

EXECUTE usp\_DeptInfo60 60;

EXECUTE usp\_DeptInfo60 333;

Name DeptName JobTitle

------------------------- ------------------------- -------------------------

Prem Chand Urban Engr Mechanical Engineer

Name DeptName JobTitle

------------------------- ------------------------- -------------------------

Sam Supervisor Administation Admin B