create database tc;

drop table IF EXISTS dbo.Employees

CREATE TABLE dbo.Employees

(

empid INT NOT NULL,

empname VARCHAR(25) NOT NULL,

mgrid INT NULL,

CONSTRAINT PK\_Employees PRIMARY KEY(empid),

CONSTRAINT CHK\_Employees\_empid CHECK(empid > 0),

CONSTRAINT FK\_Employees\_Employees

FOREIGN KEY(mgrid) REFERENCES dbo.Employees(empid)

);

use [tc];

go

create FUNCTION check\_Error( @errornum INT ) RETURNS NVARCHAR(1000) AS

BEGIN

DECLARE @message NVARCHAR(1000)

IF @errorNUM = 2627

BEGIN SET

@message = 'Handling PK violation...'

END

IF @errorNUM = 547

BEGIN SET

@message = 'Handling CHECK/FK constraint violation...'

END

IF @errorNUM = 515

BEGIN SET

@message = 'Handling NULL violation...'

END

IF @errorNUM = 245

BEGIN SET

@message = 'Handling conversion error...'

END

RETURN @message

END

Go

create procedure error\_procedur as select \* from db. Employees;

go

ALTER PROCEDURE error\_procedur (@id int, @name VARCHAR(25), @manager int) AS

BEGIN

DECLARE @errorNUM int

BEGIN TRY

INSERT INTO

dbo.Employees(empid, empname, mgrid)

VALUES

(@id, @name, @manager)

END TRY

BEGIN CATCH

SELECT @errornum = ERROR\_NUMBER()

DECLARE @showmessage NVARCHAR(MAX)

DECLARE @Message varchar(MAX) = ERROR\_MESSAGE()

DECLARE @Severity int = ERROR\_SEVERITY();

DECLARE @State int = ERROR\_STATE();

SELECT

@showmessage = dbo.check\_Error (@errornum) PRINT @showmessage; RAISERROR

(@message, @severity, @state);

END CATCH

END

go

exec dbo.error\_procedur @id = 1, @name = 'Emp1', @manager = NULL;

go

exec dbo.error\_procedur @id = 0, @name = 'Emp1', @manager = NULL;

use [tc];

go

--go

exec dbo.error\_procedur @id = 'A', @name = 'Emp1', @manager = NULL;

use [tc];

go

exec dbo.error\_procedur @id = null, @name = 'Emp1', @manager = NULL;

go

Select \* from dbo.Employees