

```

2 CREATE TRIGGER [dbo].[Trigger_OrderDelete]
3 ON [dbo].[OrderItem]
4 FOR DELETE
5 AS
6
7 DECLARE @DeletedOrderId INT
8 SELECT @DeletedOrderId = OrderId FROM deleted
9
10 ALTER TABLE [OrderItem] DROP CONSTRAINT FK_ORDERITE_REFERENCE_ORDER
11
12 DELETE FROM OrderItem WHERE OrderId = 26
13
14 ---cau 1.2
15 CREATE TRIGGER [dbo].[Trigger_Order1Delete]
16 ON [dbo].[Order]
17 FOR DELETE
18 AS
19
20 DECLARE @DeletedOrderId INT
21 SELECT @DeletedOrderId = CustomerId FROM deleted
22
23 IF(@DeletedOrderId = 1)
24 BEGIN
25     RAISERROR ('Order nay khong the xoa',
26               16,
27               1
28              );
29     ROLLBACK TRANSACTION
30 END
31
32 EXEC sp_settriggerorder @triggername = 'Trigger_Order1Delete', @order = 'First', @stmtype = 'DELETE';
33
34 DELETE FROM [Order] WHERE Id = 396
35
36 SELECT *
37 FROM [Order] where CustomerId = 1

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Results Messages

	Id	OrderDate	OrderNumber	CustomerId	TotalAmount
1	396	2013-08-25 00:00:00.000	542773	1	1086.00
2	445	2013-10-03 00:00:00.000	542822	1	878.00
3	455	2013-10-13 00:00:00.000	542832	1	330.00
4	588	2014-01-15 00:00:00.000	542965	1	851.00
5	705	2014-03-16 00:00:00.000	543082	1	491.20
6	764	2014-04-09 00:00:00.000	543141	1	960.00

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39 --- cau 1.3
40 CREATE TRIGGER [dbo].[Trigger_SupplierUpdate]
41 ON [dbo].[Supplier]
42 FOR UPDATE
43 AS
44 DECLARE @UpdatePhone NVARCHAR(30)
45 IF UPDATE(Phone)
46 BEGIN
47     SELECT @UpdatePhone = Phone FROM inserted
48     IF @UpdatePhone IS NULL OR @UpdatePhone LIKE '%[^0-9]%'
49     BEGIN
50         RAISERROR ('Phone khong duoc NULL hay co chu',
51                 16,
52                 1
53                 );
54         ROLLBACK TRANSACTION
55     END
56 END
57
58 UPDATE Supplier SET Phone = NULL WHERE Id = 1
59
60 UPDATE Supplier SET Phone = ' ' WHERE Id = 1
61
62 UPDATE Supplier SET Phone = 'abcde' WHERE Id = 1
63
64 UPDATE Supplier SET Phone = '0909400733a' WHERE Id = 1
65
66 UPDATE Supplier SET Phone = '0909400733' WHERE Id = 1
67
68 SELECT*FROM Supplier
69

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Messages

Msg 50000, Level 16, State 1, Procedure Trigger_SupplierUpdate, Line 68
 Phone khong duoc NULL hay co chu
 Msg 3609, Level 16, State 1, Line 58
 The transaction ended in the trigger. The batch has been aborted.

```

70  ---cau 2
71  CREATE FUNCTION dbo.unf_ListCompanyByCountry (@CountryDescr NVARCHAR(MAX))
72  RETURNS NVARCHAR(MAX)
73  AS
74  BEGIN
75      DECLARE @CompanyList NVARCHAR(MAX) = 'Companies in ' + @CountryDescr + ' are :';
76      DECLARE @Id INT;
77      DECLARE @CompanyName NVARCHAR(MAX);
78
79      DECLARE CompanyCursor CURSOR READ_ONLY
80      FOR
81      SELECT Id, CompanyName
82      FROM Supplier
83      WHERE Country LIKE @CountryDescr
84
85      OPEN CompanyCursor
86
87      FETCH NEXT FROM CompanyCursor INTO @Id, @CompanyName
88
89      WHILE @@FETCH_STATUS = 0
90      BEGIN
91          SET @CompanyList = @CompanyList + @CompanyName + '(ID:' + LTRIM(STR(@Id)) + ')' + ' ; ' ;
92          FETCH NEXT FROM CompanyCursor INTO @Id, @CompanyName
93      END
94
95      CLOSE CompanyCursor
96      DEALLOCATE CompanyCursor
97
98      RETURN @CompanyList
99  END
100
101  SELECT dbo.unf_ListCompanyByCountry('USA')
102
103

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Results Messages

	(No column name)
1	Companies in USA are :New Orleans Cajun Delight...

```

106  ---cau 3
107  BEGIN TRY
108      BEGIN TRANSACTION UpdateQuantityTrans
109
110      SET NOCOUNT ON;
111
112      DECLARE @NumOfUpdateRecords INT = 0;
113      DECLARE @DFactor INT;
114      SET @DFactor = 1;
115
116      UPDATE OI SET Quantity = Quantity / @DFactor
117      FROM OrderItem OI
118      INNER JOIN [Order] O on OI.OrderId = O.Id
119      INNER JOIN Customer C on O.CustomerId = C.Id
120      WHERE C.Country LIKE '%USA%'
121
122      SET @NumOfUpdateRecords = @@ROWCOUNT
123      PRINT 'Cap Nhat Thanh Cong ' + LTRIM(STR(@NumOfUpdateRecords)) + ' dong trong bang OrderItem';
124
125      COMMIT TRANSACTION UpdateQuantityTrans
126  END TRY
127  BEGIN CATCH
128      ROLLBACK TRAN UpdateQuantityTrans
129      PRINT 'Cap Nhat That Bai. Xem Chi Tiet :';
130      PRINT ERROR_MESSAGE();
131  END CATCH
132

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Messages

Cap Nhat Thanh Cong 352 dong trong bang OrderItem

```

134 ---cau 4
135 BEGIN TRY
136 BEGIN TRANSACTION CompareTwoCountryTrans
137
138 SET NOCOUNT ON;
139 DECLARE @Country1 NVARCHAR(40)
140 DECLARE @Country2 NVARCHAR(40)
141
142 SET @Country1 = 'USA'
143 SET @Country2 = 'UK'
144
145 CREATE TABLE #CountryInfo1
146 (
147     SupplierId INT,
148     Country NVARCHAR(40)
149 )
150
151 DECLARE @CountryInfo2 TABLE
152 (
153     SupplierId INT,
154     Country NVARCHAR(40)
155 )
156
157 INSERT INTO #CountryInfo1
158 SELECT P.SupplierId, S.Country
159 FROM Product P
160 INNER JOIN Supplier S ON P.SupplierId = S.Id
161 WHERE S.Country = @Country1
162
163 INSERT INTO @CountryInfo2
164 SELECT P.SupplierId, S.Country
165 FROM Product P
166 INNER JOIN Supplier S ON P.SupplierId = S.Id
167 WHERE S.Country = @Country2
168
169 DECLARE @NumProduct1 INT
170 SET @NumProduct1 = (SELECT COUNT(SupplierId) FROM #CountryInfo1);
171 DECLARE @NumProduct2 INT
172 SET @NumProduct2 = (SELECT COUNT(SupplierId) FROM @CountryInfo2);
173

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173
174 PRINT
175 CASE
176     WHEN @NumProduct1 = @NumProduct2
177         THEN 'So Luong San Pham Cua ' + @Country1 + ' = ' + @Country2
178     WHEN @NumProduct1 > @NumProduct2
179         THEN 'So Luong San Pham Cua ' + @Country1 + ' nhieu hon ' + @Country2
180     ELSE 'So Luong San Pham Cua ' + @Country1 + ' it hon ' + @Country2
181 END
182
183 PRINT 'So Luong San Pham Cua ' + @Country1 + ' : ' + LTRIM(STR(@NumProduct1))
184 PRINT 'So Luong San Pham Cua ' + @Country2 + ' : ' + LTRIM(STR(@NumProduct2))
185
186 DROP TABLE #CountryInfo1
187
188 COMMIT TRANSACTION CompareTwoCountryTrans
189 END TRY
190 BEGIN CATCH
191     ROLLBACK TRAN CompareTwoCountryTrans
192     PRINT 'Co Loi Xay Ra. Xem Chi Tiet :';
193     PRINT ERROR_MESSAGE();
194 END CATCH

```

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Messages

So Luong San Pham Cua USA nhieu hon UK
 So Luong San Pham Cua USA : 12
 So Luong San Pham Cua UK : 7