

## گزارش کار جلسه ۳

### سوال اول

ابتدا جدول را می‌سازیم و آن را با داده‌های گفته شده پر می‌کنیم که کدهای sql این موارد به پیوست ارسال می‌گردد.

حال به سراغ پرس و جوها می‌رویم:

الف) کاربران به ترتیب نام خانوادگی:

```
SELECT *
FROM persons
ORDER BY LastName;
```

100 %

Results Messages

	P_Id	LastName	FirstName	Address	City
1	1	Hansen	Ola	Timoteivn 10	Sandnes
2	4	Nilsen	Tom	Vingvn 23	Stavanger
3	3	Pettersen	Kari	Storgt 20	Stavanger
4	2	Svendson	Tove	Borgvn 23	Sandnes

ب) ستون شماره موبایل را با محدودیت مشخص شده اضافه می‌کنیم:

```
ALTER TABLE persons
ADD PhoneNumber nvarchar(13)
CONSTRAINT PhonePrefix CHECK(PhoneNumber LIKE '001%');
```

```
UPDATE persons
SET PhoneNumber = '0012415634567'
WHERE P_Id = 1;
```

```
UPDATE persons
SET PhoneNumber = '0018842962813'
WHERE P_Id = 2;
```

```
UPDATE persons
SET PhoneNumber = '0014447725674'
WHERE P_Id = 3;
```

```
UPDATE persons
SET PhoneNumber = '0018539642367'
WHERE P Id = 4;
```

100 %

Messages

(1 row affected)

(1 row affected)

(1 row affected)

(1 row affected)

Completion time: 2021-04-12T18:18:50.9715237+04:30

پ) با اصلاحاتی که در کورسز بیان شده است، داریم:

```

SELECT FirstName, LastName, Addr = (
    CASE
    WHEN Address LIKE '%Street%' THEN REPLACE(Address, 'Street', 'St.')
    WHEN Address LIKE '%Number%' THEN REPLACE(Address, 'Number', 'No.')
    WHEN Address LIKE '%St.%' THEN Address
    WHEN Address LIKE '%No.%' THEN Address
    ELSE CONCAT(Address, ' (Invalid Address)')
    END
)
FROM persons;

```

100 %

Results Messages

	FirstName	LastName	Addr
1	Ola	Hansen	Timoteivn 10 (Invalid Address)
2	Tove	Svendson	Borgvn 23 (Invalid Address)
3	Kari	Pettersen	Storgt 20 (Invalid Address)
4	Tom	Nilsen	Vingvn 23 (Invalid Address)

ت) در قالب یک ترزکشن موارد زیر را انجام می‌دهیم:

```

SET IDENTITY_INSERT persons ON
BEGIN TRANSACTION T
INSERT INTO persons(P_Id, LastName, FirstName, Address, City) VALUES (7, 'Tjessem', 'Jakob', 'Nissestien 67', 'Sandnes', '0012452456223');
SELECT P_Id, LastName, FirstName
FROM persons
ORDER BY FirstName
COMMIT TRANSACTION T;
SET IDENTITY_INSERT persons OFF

```

100 %

Results Messages

	P_Id	LastName	FirstName
1	7	Tjessem	Jakob
2	3	Pettersen	Kari
3	1	Hansen	Ola
4	4	Nilsen	Tom
5	2	Svendson	Tove

ث)

```

WAITFOR DELAY '00:00:10';
SELECT *
FROM persons
WHERE City LIKE 'S%';

```

100 %

Results Messages

	P_Id	LastName	FirstName	Address	City	Phone
1	1	Hansen	Ola	Timoteivn 10	Sandnes	0012415634567
2	2	Svendson	Tove	Borgvn 23	Sandnes	0018842962813
3	3	Pettersen	Kari	Storgt 20	Stavanger	0014447725674
4	4	Nilsen	Tom	Vingvn 23	Stavanger	0018539642367
5	7	Tjessem	Jakob	Nissestien 67	Sandnes	0012452456223

(ج) استفاده از حلقه و متغیرها:

```

DECLARE @temp AS INT = (SELECT MAX(P_Id) FROM persons);
WHILE @temp > 0
BEGIN
    PRINT 'okay|'
    SET @temp = @temp - 1
END;

```

100 %

Messages

okay  
okay  
okay  
okay  
okay  
okay  
okay  
okay

(ج) استفاده از عبارات شرطی:

```

SET IDENTITY_INSERT persons ON
DECLARE @Tjessem_Phone AS nvarchar(13) = (SELECT Phone FROM persons WHERE LastName = 'Tjessem');
IF @Tjessem_Phone > '0011234567890'
INSERT INTO persons(P_Id, LastName, FirstName, Address, City, Phone) VALUES (6, 'Taylor', 'Jackson', 'Nisseisten 87', 'Sandnes', '0011234567890');
ELSE
INSERT INTO persons(P_Id, LastName, FirstName, Address, City, Phone) VALUES (8, 'Taylor', 'Jackson', 'Nisseisten 87', 'Sandnes', '0011234567890');
SET IDENTITY_INSERT persons OFF

```

100 %

Messages

(1 row affected)

Completion time: 2021-04-12T21:17:03.3987594+04:30

سوال دوم

جدول را می‌سازیم و داده‌ها را وارد آن می‌کنیم که کد sql آن به پیوست ارسال می‌گردد.

پرس‌وجوی خواسته شده:

```

DECLARE @view TABLE(
    name varchar(50),
    student_id int,
    old_grade float,
    new_grade float);

UPDATE students
SET grade = grade + 2
OUTPUT deleted.name, deleted.student_id, deleted.grade, inserted.grade
into @view
WHERE grade < 15;
SELECT * FROM @view;

```

100 %

Results Messages

	name	student_id	old_grade	new_grade
1	R5	8831012	11	13
2	R2	8831043	10	12
3	R1	8831047	12	14