

جلسه چهارم مجازی

کنکور ۹۹

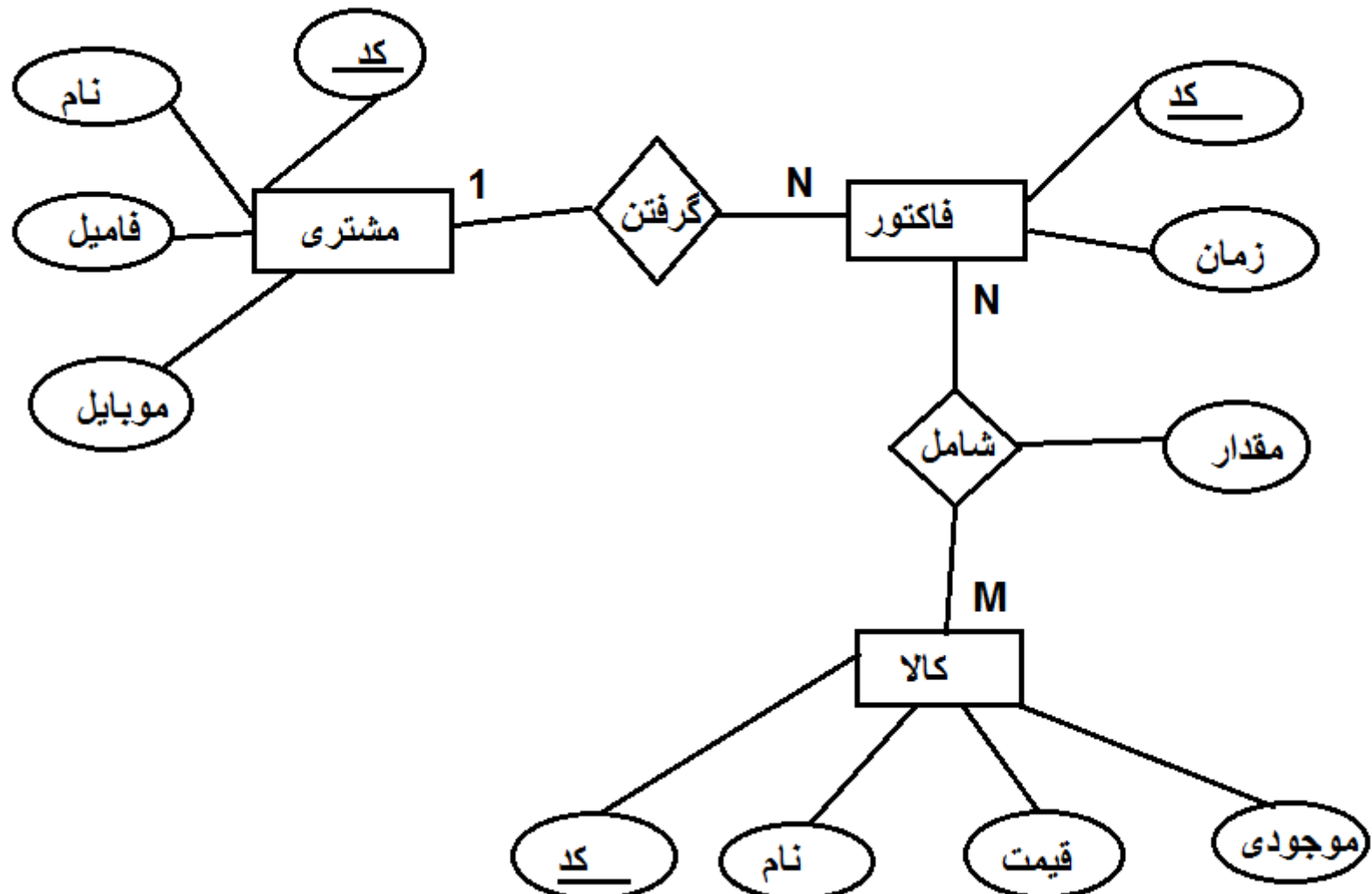
پودمان اول کتاب توسعه برنامه سازی و پایگاه داده

رشته شبکه و نرم افزار

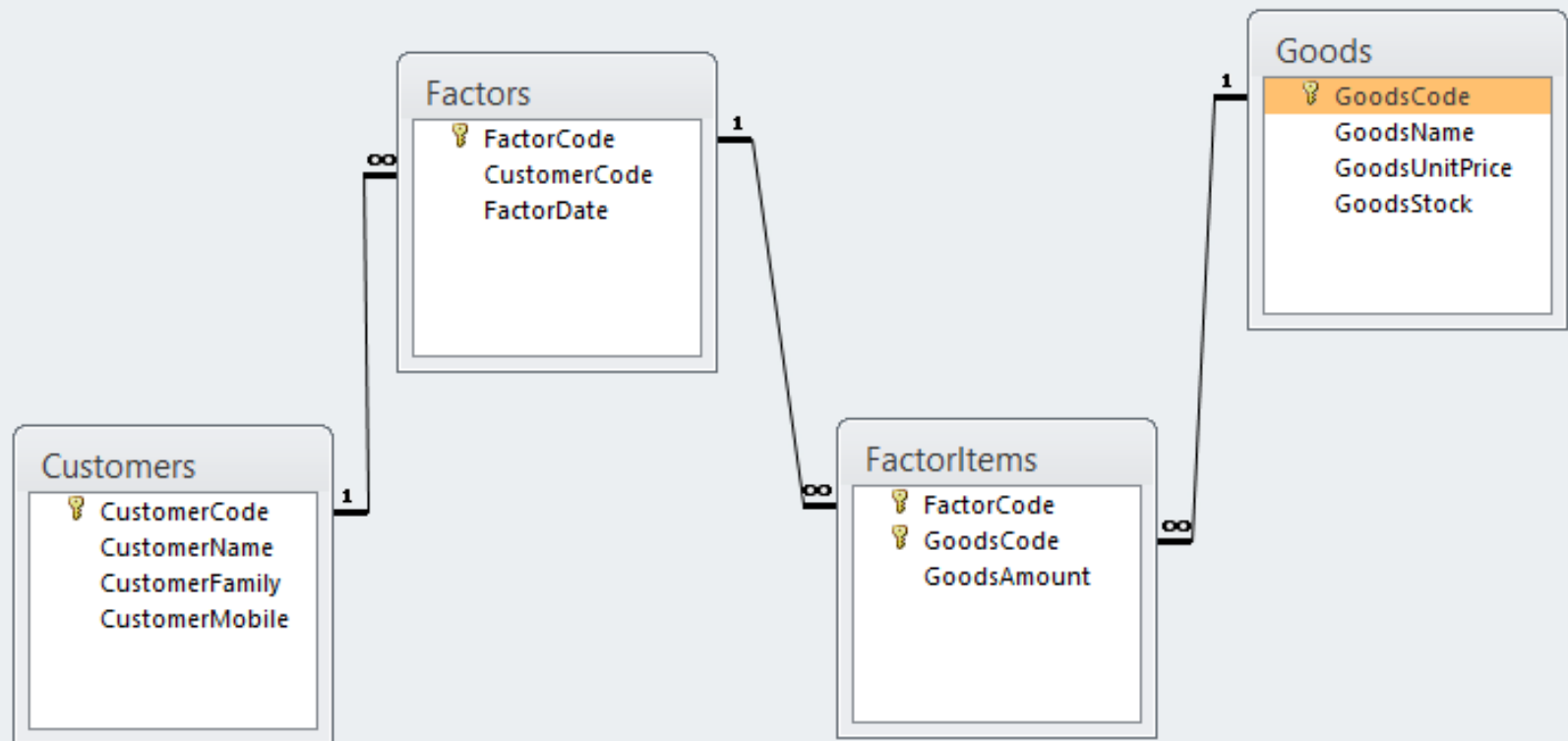
عملیات روی پایگاه داده

- × اضافه کردن رکورد جدید INSERT
- × بروزرسانی رکوردها UPDATE
- × پاک کردن رکوردها DELETE
- × بازیابی رکوردها SELECT
- × تغییر ساختار

SAMPLE1



SAMPLE1



INSERT INTO

```
INSERT INTO Customers(  
CustomerCode, CustomerName, CustomerFamily, CustomerMobile)  
VALUES( 1, 'a', 'aa', '11');
```

```
INSERT INTO table_name [(field1[, field2[,...]])]  
VALUES (value1[, value2[,...]])
```

UPDATE

UPDATE Customers

SET CustomerName='A' ,CustomerFamily='AA' ,CustomerMobile='111'

WHERE CustomerCode=1;

شکل کلی دستور UPDATE

UPDATE table

SET newvalue

WHERE criteria

UPDATE

```
DELETE  
FROM Customers  
WHERE CustomerCode=1;
```

شکل کلی دستور DELETE

```
DELETE  
FROM table_name  
WHERE criteria
```

اگر دستور DELETE بدون WHERE استفاده شود همه رکوردها ویرایش می شوند.

SELECT

شکل کلی دستور **SELECT**

```
SELECT field_list  
FROM table_name  
[WHERE ...]  
[GROUP BY ...]  
[ORDER BY ...]
```


SELECT

CustomerCode ▾	CustomerName ▾	CustomerFamily ▾	CustomerMobile ▾
1	A	AA	11
2	B	BB	22
3	A	BB	33
4	A	AB	44
5	C	AC	55
6	D	CC	66
7	B	BB	77
8	A	ABB	88
9	B	AA	99

SELECT *

FROM Customers

WHERE CustomerName='A' AND NOT CustomerFamily='AA';

CustomerCode ▾	CustomerName ▾	CustomerFamily ▾	CustomerMobile ▾
3	A	BB	33
4	A	AB	44
8	A	ABB	88

SELECT

CustomerCode ▾	CustomerName ▾	CustomerFamily ▾	CustomerMobile ▾
1	A	AA	11
2	B	BB	22
3	A	BB	33
4	A	AB	44
5	C	AC	55
6	D	CC	66
7	B	BB	77
8	A	ABB	88
9	B	AA	99

```
SELECT CustomerCode AS [کد مشتری] , CustomerName AS [نام مشتری] , CustomerFamily AS [فامیلی مشتری]  
FROM Customers  
WHERE CustomerName='A' AND NOT CustomerFamily='AA';
```

کد مشتری ▾	نام مشتری ▾	فامیلی مشتری ▾
3	A	BB
4	A	AB
8	A	ABB

SELECT

CustomerCode	CustomerName	CustomerFamily	CustomerMobile
1	A	AA	11
2	B	BB	22
3	A	BB	33
4	A	AB	44
5	C	AC	55
6	D	CC	66
7	B	BB	77
8	A	ABB	88
9	B	AA	99

```
SELECT CustomerCode AS [کد مشتری] , CustomerName + ' ' + CustomerFamily AS [نام و نام خانوادگی]  
FROM Customers  
WHERE CustomerName='A' AND NOT CustomerFamily='AA';
```

کد مشتری	نام و نام خانوادگی
3	A BB
4	A AB
8	A ABB

SELECT

CustomerCode ▾	CustomerName ▾	CustomerFamily ▾	CustomerMobile ▾
1	A	AA	11
2	B	BB	22
3	A	BB	33
4	A	AB	44
5	C	AC	55
6	D	CC	66
7	B	BB	77
8	A	ABB	88
9	B	AA	99

SELECT CustomerName FROM Customers;

CustomerName ▾
A
B
A
A
C
D
B
A
B

SELECT TOP 3 CustomerName FROM Customers

CustomerName ▾
A
B
A

SELECT DISTINCT CustomerName FROM Customers;

CustomerName ▾
A
B
C
D

SELECT

CustomerCode ▾	CustomerName ▾	CustomerFamily ▾	CustomerMobile ▾
1	A	AA	11
2	B	BB	22
3	A	BB	33
4	A	AB	44
5	C	AC	55
6	D	CC	66
7	B	BB	77
8	A	ABB	88
9	B	AA	99

SELECT COUNT(CustomerCode) AS CustomerCount FROM Customers;

CustomerCount ▾
9

SELECT

CustomerCode	CustomerName	CustomerFamily	CustomerMobile
1	A	AA	11
2	B	BB	22
3	A	BB	33
4	A	AB	44
5	C	AC	55
6	D	CC	66
7	B	BB	77
8	A	ABB	88
9	B	AA	99

```
SELECT CustomerName , COUNT(CustomerName) AS CutomerCount FROM Customers  
GROUP BY CustomerName;
```

CustomerName	CutomerCount
A	4
B	3
C	1
D	1

SELECT

CustomerCode	CustomerName	CustomerFamily	CustomerMobile
1	A	AA	11
2	B	BB	22
3	A	BB	33
4	A	AB	44
5	C	AC	55
6	D	CC	66
7	B	BB	77
8	A	ABB	88
9	B	AA	99

```
SELECT CustomerName , COUNT(CustomerName) AS CutomerCount FROM Customers  
GROUP BY CustomerName  
HAVING COUNT(CustomerName)> 1;
```

CustomerName	CutomerCount
A	4
B	3

SELECT

CustomerCode	CustomerName	CustomerFamily	CustomerMobile
1	A	AA	11
2	B	BB	22
3	A	BB	33
4	A	AB	44
5	C	AC	55
6	D	CC	66
7	B	BB	77
8	A	ABB	88
9	B	AA	99

```
SELECT CustomerName , COUNT(CustomerName) AS CutomerCount FROM Customers
WHERE CustomerFamily <>'AA'
GROUP BY CustomerName
HAVING COUNT(CustomerName)> 1;
```

CustomerName	CutomerCount
A	3
B	2

SELECT

CustomerCode	CustomerName	CustomerFamily	CustomerMobile
1	A	AA	11
2	B	BB	22
3	A	BB	33
4	A	AB	44
5	C	AC	55
6	D	CC	66
7	B	BB	77
8	A	ABB	88
9	B	AA	99

```
SELECT CustomerName , COUNT(CustomerName) AS CutomerCount FROM Customers
WHERE CustomerFamily <> 'AA'
GROUP BY CustomerName
HAVING COUNT(CustomerName)>1
ORDER BY COUNT(CustomerName);
```

CustomerName	CutomerCount
B	2
A	3

از توجه شما متشکرم

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خرداد ۱۳۹۹