

دستور ساخت اولیه جداول (بدون کلید خارجی):

```
CREATE TABLE branch
)
,assets INT NOT NULL
,city VARCHAR(20) NOT NULL
,name VARCHAR(20) NOT NULL
(PRIMARY KEY (name
;{
```

```
CREATE TABLE customer
)
,name VARCHAR(20) NOT NULL
,id INT NOT NULL
,street VARCHAR(20) NOT NULL
,city VARCHAR(20) NOT NULL
(PRIMARY KEY (id
;{
```

```
CREATE TABLE employee
)
,id INT NOT NULL
,department VARCHAR(20) NOT NULL
,length INT NOT NULL
,name VARCHAR(20) NOT NULL
,number INT NOT NULL
,start_date DATE NOT NULL
(PRIMARY KEY (id
;{
```

```
CREATE TABLE loan
)
,number INT NOT NULL
,amount INT NOT NULL
(PRIMARY KEY (number
;{
```

```
CREATE TABLE payment
)
,number INT NOT NULL
,date DATE NOT NULL
,amount INT NOT NULL
(PRIMARY KEY (number
;{
```

```
CREATE TABLE account
)
,number INT NOT NULL
,balance INT NOT NULL
(PRIMARY KEY (number
;{
```

```
CREATE TABLE savings_account
)
,id INT NOT NULL PRIMARY KEY
interest_rate INT NOT NULL
;{
```

```
CREATE TABLE checking_account
)
,id INT NOT NULL PRIMARY KEY
overdraft_amount INT NOT NULL
;{
```

یکی.

ساخت View:

```
CREATE VIEW loan_view AS
SELECT
name, id, amount, branch
FROM dbo.customer
LEFT JOIN loan ON customer.id = loan.customer
```

ساخت View:

```
CREATE VIEW interest_view AS
SELECT
number, interest_rate
FROM dbo.account
LEFT JOIN dbo.savings_account ON savings_account.account = account.number
```

ساخت View:

```
CREATE VIEW payment_no_view AS
SELECT
payment.number
FROM dbo.loan
LEFT JOIN dbo.payment ON payment.loan = loan.number
WHERE city = 'Tehran'
```

دو.

ساخت رویه:

```
create procedure get_balance
,(name varchar(20)@
bal int output, @num int output@
as
begin

SELECT @bal=balance, @num = number
FROM dbo.account
WHERE account.customer = @name

End
```

ساخت رویه:

```
create procedure get_branch
,num int@
name varchar(20) output@
as
begin

SELECT @name = branch
FROM dbo.payment
LEFT JOIN dbo.loan ON payment.loan = loan.number
WHERE payment.number = @num

End
```

ساخت رویه:

```
) create procedure wait_select
(id int@
as
begin
;'WAITFOR DELAY '00:00:10
select * from dbo.customer where customer.id = @id
End
```

ساخت تابع:

```
()create function select_max
returns int
as
begin
return (select top 1 number from dbo.account
left join dbo.savings_account on savings_account.account = account.number
((where interest_rate = (select max(interest_rate) from dbo.savings_account
End
```

ساخت تابع:

```
((create function get_dept(@name varchar(10)
(returns varchar(20)
as
begin
(return (select top 1 department from dbo.employee where name = @name
end
```

ساخت آغازگر:

بخش ب:

```
CREATE trigger stop_branch_name
ON dbo.branch
INSTEAD OF UPDATE
AS
) IF EXISTS
* SELECT
FROM INSERTED I
JOIN DELETED D ON D.name = I.name AND ISNULL(D.name,I.name+'.') <>
('.'+ISNULL(I.name,D.name
(
;(RAISERROR('Changes to the name in branch are NOT allowed', 16,1
GO
```