16- SQL Assignment -2 DOTNET

1. Create non clustered index with 60% leaf page size.

CREATE NONCLUSTERED INDEX [INX\_Works\_On\_EnterDate]

ON [dbo].[Works\_On]

(

[Enter\_Date] ASC

) WITH (FILLFACTOR = 60)

1. Unique composite index

CREATE UNIQUE NONCLUSTERED INDEX [IUX\_Employee\_fName\_lName]

ON [dbo].[Employee]

(

[Emp\_FName],

[Emp\_LName]

)

1. Employees works for department d1

CREATE VIEW [dbo].[VW\_D1\_EMP\_LIST]

AS

SELECT EmpNo, F\_Name, L\_Name, DeptId

FROM dbo.Employee

WHERE (DeptId = 'd1')

1. Project information except budget column

CREATE VIEW [dbo].[VW\_PROJECT\_INFO]

AS

SELECT Project\_no, Project\_Name

FROM [dbo].[Project]

1. Employee list who entered their project in the second half of the year 1988

CREATE VIEW [dbo].[VW\_EMP\_EnteredIn\_SecHalfOf1998]

AS

SELECT e.F\_Name, e.L\_Name

FROM[dbo].[Works\_On] wo

INNER JOIN [dbo].[Employee] e

ON wo.Emp\_No=e.Emp\_No

WHERE year(Enter\_Date)=1998 and month(Enter\_Date)>6

1. Rename columns of previously created view f\_name and l\_name to first and last

ALTER VIEW [dbo].[VW\_EMP\_EnteredIn\_SecHalfOf1998]

AS

SELECT e. F\_Name as 'first', e. L\_Name as 'last'

FROM[dbo].[Works\_On] wo

INNER JOIN [dbo].[Employee] e

ON wo.Emp\_No=e.Emp\_No

WHERE year(Enter\_Date)=1998 and month(Enter\_Date)>6

1. Use the view in exercise#3 , display employee list with last name starts with letter “M”

ALTER VIEW [dbo].[VW\_D1\_EMP\_LIST]

AS

SELECT Emp\_No, F\_Name, L\_Name, DeptId

FROM dbo.Employee

WHERE (DeptId = 'D1') and L\_Name like 'M%'

1. Project details of employee named Smith

CREATE VIEW [dbo].[VW\_SMITH\_PROJ\_DETAILS]

AS

SELECT e.F\_Name ,

e.L\_Name,

p.Project\_no,

p.Project\_Name,

p.Budget,

wo.Job,

wo.Enter\_Date

FROM[dbo].[Works\_On] wo

INNER JOIN [dbo].[Employee] e

ON wo.Emp\_No=e.Emp\_No

INNER JOIN [dbo].[Project] p

ON p.Project\_no=wo.Project\_id

WHERE e.Emp\_LName='smith'

1. Use the view in exercise#3, modify the view and display all the employees list that work either for department d1 or d2 or both.

ALTER VIEW [dbo].[VW\_D1\_EMP\_LIST]

AS

SELECT Emp\_No,

F\_Name,

L\_Name,

DeptId

FROM dbo.Employee

WHERE (DeptId = 'd1' or DeptId='d2')

1. Using the view from the exercise#4 , insert details of new project no “P2” and name “Moon”

INSERT INTO [dbo].[VW\_PROJECT\_INFO]

([Project\_no]

,[Project\_Name])

VALUES

('P2',

'Moon'

);

1. Create view with check option where employee number should be less than 10000 and use that view to insert new record with employee number 22123

CREATE VIEW [dbo].[VW\_EMP\_LIST\_CHECK\_OPTION]

AS

SELECT Emp\_No,

Emp\_FName,

Emp\_LName

FROM dbo.Employee

WHERE Emp\_No<10000

WITH CHECK OPTION;

Insert new record using view

INSERT INTO [dbo].[VW\_EMP\_LIST\_CHECK\_OPTION]

([Emp\_No]

,[Emp\_FName]

,[Emp\_LName]

,[Dept])

VALUES

( 22123,

'Kohn',

'Kohn',

'd3'

);

Result:

Msg 550, Level 16, State 1, Line 2

The attempted insert or update failed because the target view either specifies WITH CHECK OPTION or spans a view that specifies WITH CHECK OPTION and one or more rows resulting from the operation did not qualify under the CHECK OPTION constraint.

The statement has been terminated.

1. Create view using check option to get the full details from works\_on table for all the employees worked during years 1998 and 1999.

After that modify view.

CREATE VIEW VW\_WORKED\_ON\_BETWEEN\_1998\_1999

AS

SELECT WO.\*

FROM [dbo].[Works\_On] WO

WHERE year(WO.Enter\_Date) BETWEEN 1998 AND 1999

WITH CHECK OPTION;

Modify record

UPDATE [dbo].[VW\_WORKED\_ON\_BETWEEN\_1998\_1999]

SET

[Enter\_Date] = '06/01/1997'

WHERE Emp\_No=19346

Note: Employee Number 19346 is NOT available in the works on table, so 0 rows would be affected. If we use the existing employee to update with the provided date constraint will not allow to update the data.