**פתרון תרגילים מחוברת תרגילים**

**פרק 17 - Table Constraints using Edate**

1.

CREATE NONCLUSTERED INDEX [nc\_MemberId\_Login]

ON [Operation].[MemberSessions] ([MemberId] ASC, [LoginDateTime] ASC)

WITH (FILLFACTOR = 80) ON [PRIMARY]

2.

CREATE UNIQUE NONCLUSTERED INDEX [NC\_Name] ON [Lists].[Countries] ([Name] ASC)

WITH (FILLFACTOR = 100) ON [PRIMARY]

CREATE UNIQUE NONCLUSTERED INDEX [NC\_Name] ON [Lists].[Genders] ([Name] ASC)

WITH (FILLFACTOR = 100) ON [PRIMARY]

CREATE UNIQUE NONCLUSTERED INDEX [NC\_Name] ON [Lists].[InvitationStatuses] ([Name] ASC)

WITH (FILLFACTOR = 100) ON [PRIMARY]

CREATE UNIQUE NONCLUSTERED INDEX [NC\_Name] ON [Lists].[MaritalStatuses] ([Name] ASC)

WITH (FILLFACTOR = 100) ON [PRIMARY]

CREATE UNIQUE NONCLUSTERED INDEX [NC\_Name] ON [Lists].[SessionEndReasons] ([Name] ASC)

WITH (FILLFACTOR = 100) ON [PRIMARY]

3.

ALTER TABLE [Operation].[Invitations] WITH CHECK

ADD CONSTRAINT [fk\_Invitations\_StatusId\_InvitationStatuses\_Id] FOREIGN KEY([StatusId])

REFERENCES [Lists].[InvitationStatuses] ([Id])

ON DELETE NO ACTION ON UPDATE NO ACTION

ALTER TABLE [Operation].[Members] WITH CHECK

ADD CONSTRAINT [fk\_Members\_CountryId\_Countries\_Id] FOREIGN KEY([CountryId])

REFERENCES [Lists].[Countries] ([Id])

ON DELETE NO ACTION ON UPDATE NO ACTION

ALTER TABLE [Operation].[Members] WITH CHECK

ADD CONSTRAINT [fk\_Members\_GenderId\_Genders\_Id] FOREIGN KEY([GenderId])

REFERENCES [Lists].[Genders] ([Id])

ON DELETE NO ACTION ON UPDATE NO ACTION

ALTER TABLE [Operation].[Members] WITH CHECK

ADD CONSTRAINT [fk\_Members\_MaritalStatusId\_MaritalStatuses\_Id] FOREIGN KEY([MaritalStatusId])

REFERENCES [Lists].[MaritalStatuses] ([Id])

ON DELETE NO ACTION ON UPDATE NO ACTION

ALTER TABLE [Operation].[Members] WITH CHECK

ADD CONSTRAINT [fk\_Members\_SexualPreferenceId\_Genders\_Id] FOREIGN KEY([SexualPreferenceId])

REFERENCES [Lists].[Genders] ([Id])

ON DELETE NO ACTION ON UPDATE NO ACTION

ALTER TABLE [Operation].[MemberSessions] WITH CHECK

ADD CONSTRAINT [fk\_MemberSessions\_EndReasonId\_SessionEndReasons\_Id] FOREIGN KEY([EndReasonId])

REFERENCES [Lists].[SessionEndReasons] ([Id])

ON DELETE NO ACTION ON UPDATE NO ACTION

4.

CREATE NONCLUSTERED INDEX [NC\_id] ON [Operation].[MemberSessions] ([Id] ASC)

WITH (FILLFACTOR = 80) ON [PRIMARY]

5.

CREATE TABLE [Operation].[MemberSearches](

[Id] [int] IDENTITY(1,1) NOT NULL,

[SessionID] [int] NOT NULL,

[DateAndTime] [datetime2](0) NOT NULL default getdate(),

[SearchCriteria] [xml] NOT NULL,

[SearchResultCount] [int] NOT NULL,

CONSTRAINT [pk\_MemberSearches\_c\_Id] PRIMARY KEY CLUSTERED ([Id] ASC)

WITH (FILLFACTOR = 100) ON [PRIMARY],

CONSTRAINT [fk\_MemberSearches\_SessionId] FOREIGN KEY ([SessionID])

REFERENCES [Operation].[MemberSessions] ([Id]),

CONSTRAINT [equal\_greater\_than\_zero] CHECK ([SearchResultCount] >= 0)

) ON [PRIMARY]

6.

ALTER TABLE [Operation].[Members] WITH NOCHECK

ADD CONSTRAINT [check\_age] CHECK (DATEDIFF(YY,BirthDate,getdate()) >= 18)

7.

declare @i as int = 0;

while @i < 100

begin

insert into eDate.Operation.Members

(Username,Password,FirstName,LastName,CountryId,EmailAddress,GenderId,

BirthDate,RegistrationDateTime)

values ('un','pwd','fn','ls',1,'email@email.com',round(rand(2),0),'2010-01-01',getdate())

set @i = @i + 1;

end

Cannot insert the above because of the constraint.

Disabling constraint:

ALTER TABLE [Operation].[Members] NOCHECK CONSTRAINT check\_age

8.

ALTER TABLE [Operation].[Members] DROP CONSTRAINT [pk\_Members\_c\_Id]

GO

ALTER TABLE [Operation].[Members] ADD CONSTRAINT [pk\_Members\_c\_Id] PRIMARY KEY CLUSTERED ([Id] ASC)

WITH (FILLFACTOR = 100) ON [PRIMARY]

GO

9.

ALTER TABLE [Operation].[MemberSessions] WITH CHECK

ADD CONSTRAINT [fk\_Members\_Id] FOREIGN KEY([MemberId])

REFERENCES [Operation].[Members] ([Id])

10.

ALTER TABLE [Operation].[Members] WITH NOCHECK

ADD CONSTRAINT [check\_email] CHECK ([EmailAddress] like '%@%')

11.

select s.name as SchemaName, t.name as TableName,cc.name as CheckConstraintName,cc.definition,

case when cc.is\_not\_trusted = 1 then 'NotTrusted' else 'Trusted' end IsTrusted

from sys.check\_constraints cc

join sys.tables t on cc.parent\_object\_id = t.object\_id and cc.schema\_id = t.schema\_id

join sys.schemas s on t.schema\_id = s.schema\_id