

```
1  --          ##### FLUSH #####
2
3  USE [DWTaxiService-sdd65]
4  GO
5
6
7  --Drop all foreign key restraints
8  ALTER TABLE dbo.FactTrips DROP CONSTRAINT [FK_FactTrips_DimDates]
9
10 ALTER TABLE dbo.FactTrips DROP CONSTRAINT [FK_FactTrips_DimLocation]
11
12 ALTER TABLE dbo.FactTrips DROP CONSTRAINT [FK_FactTrips_DimDriver]
13
14 ALTER TABLE dbo.DimLocation DROP CONSTRAINT [FK_DimLocation_DimCity]
15
16 GO
17
18 --TRUNCATE each table
19 TRUNCATE TABLE dbo.FactTrips
20
21 TRUNCATE TABLE dbo.DimLocation
22
23 TRUNCATE TABLE dbo.DimCity
24
25 TRUNCATE TABLE dbo.DimDriver
26
27 TRUNCATE TABLE dbo.DimDates
28
29 GO
30
31 --Add back FK restraints
32 ALTER TABLE [dbo].[FactTrips] WITH CHECK ADD CONSTRAINT [FK_FactTrips_DimDates]  ↗
33     FOREIGN KEY ([DateKey])
34     REFERENCES [dbo].[DimDates] ([DateKey])
35     GO
36 ALTER TABLE [dbo].[FactTrips] WITH CHECK ADD CONSTRAINT  ↗
37     [FK_FactTrips_DimLocation] FOREIGN KEY ([LocationKey])
38     REFERENCES [dbo].[DimLocation] ([LocationKey])
39     GO
40 ALTER TABLE [dbo].[FactTrips] WITH CHECK ADD CONSTRAINT [FK_FactTrips_DimDriver]  ↗
41     FOREIGN KEY ([DriverKey])
42     REFERENCES [dbo].[DimDriver] ([DriverKey])
43     GO
44 ALTER TABLE [dbo].[DimLocation] WITH CHECK ADD CONSTRAINT  ↗
45     [FK_DimLocation_DimCity] FOREIGN KEY([CityKey])
46     REFERENCES [dbo].[DimCity] ([CityKey])
47     GO
48
```

```

49 -- ##### FILL #####
50
51 --Populate Tables with no FK. ~ DimCity | DimDriver | DimDate
52
53 INSERT INTO dbo.DimCity
54 (
55 CityId,
56 CityName
57 )
58 (
59 SELECT
60 [CityId] = CAST ([City_Code] AS nchar(10) ),
61 [CityName] = CAST([CountryName] AS nvarchar(50))
62 FROM [TaxiServiceDB-sdd65].[dbo].[City]
63 )
64 GO
65
66 INSERT INTO dbo.DimDriver
67 (
68 DriverId,
69 DriverName
70 )
71 (
72 SELECT
73 [DriverId] = CAST([Driver_Id] as nchar(8)),
74 [DriverName] = CAST(isNull([FirstName], 'Unknown') + ' ' + (isNull([LastName],
75 FROM [TaxiServiceDB-sdd65].[dbo].[Driver]
76 )
77 GO
78
79 --Populate
80 DimDates-----
81
82
80
81 Declare @StartDate datetime = '01/01/2010'
82 Declare @EndDate datetime = '12/31/2011'
83 Declare @DateInProcess datetime
84 Set @DateInProcess = @StartDate
85 While @DateInProcess <= @EndDate
86 Begin
87 Insert Into DimDates
88 ( [Date],
89 [DateName],
90 [Month],
91 [MonthName],
92 [Year],
93 [YearName]
94 )
95 Values
96 (
97 @DateInProcess,

```

```
198  DateName ( weekday, @DateInProcess ),
199  Month( @DateInProcess ),
200  DateName( month, @DateInProcess ),
201  Year(@DateInProcess),
202  Cast( Year(@DateInProcess ) as nVarchar(50) )
203 )
204
205 Set @DateInProcess = DateAdd(d, 1, @DateInProcess)
206 End
207 Set Identity_Insert [DWTaxiService-sdd65].[dbo].[DimDates] On
208 Insert Into [dbo].[DimDates]
209 (
210  [DateKey],
211  [Date],
212  [DateName],
213  [Month],
214  [MonthName],
215  [Year],
216  [YearName]
217 )
218 (
219  Select
220  [DateKey] = -1,
221  [Date] = '01/01/2009',
222  [DateName] = Cast('Unknown Day' as nVarchar(50)),
223  [Month] = -1,
224  [MonthName] = Cast('Unknown Month' as nVarchar(50)),
225  [Year] = -1,
226  [YearName] = Cast('Unknown Year' as nVarchar(50))
227 )
228 Insert Into [dbo].[DimDates]
229 (
230  [DateKey],
231  [Date],
232  [DateName],
233  [Month],
234  [MonthName],
235  [Year],
236  [YearName]
237 )
238 (
239  Select
240  [DateKey] = -2,
241  [Date] = '01/01/2009',
242  [DateName] = Cast('Corrupt Day' as nVarchar(50)),
243  [Month] = -2,
244  [MonthName] = Cast('Corrupt Month' as nVarchar(50)),
245  [Year] = -2,
246  [YearName] = Cast('Corrupt Year' as nVarchar(50))
247 )
248 Go
249 Set Identity_Insert [DWTaxiService-sdd65].[dbo].[DimDates] off -- don't forget ➤
```

```
        this!
150 GO
151 -----
152 --Populate Tables with Foreign Keys ~ DimLocation | FactTrips
153
154 --Populate DimLocation --> 1 Foreign Key
155 INSERT INTO [dbo].[DimLocation]
156 (
157 CityKey,
158 StreetId,
159 Street
160 )
161 (
162 SELECT
163 [CityKey] = [DimCity].[CityKey],
164 [StreetId] = [Street_Code],
165 [Street] = CAST (isNull([StreetName], 'Unknown') as nvarchar(50))
166
167 FROM ([TaxiServiceDB-sdd65].[dbo].[Street] INNER JOIN DimCity
168 ON [TaxiServiceDB-sdd65].[dbo].[Street].[City_Code] = DimCity.CityId)
169 )
170 GO
171
172 --Populate FactTrips --> 3 Foreign Keys
173 INSERT INTO [dbo].[FactTrips]
174 (
175 TripNumber,
176 DateKey,
177 LocationKey,
178 DriverKey,
179 TripMileage,
180 TripCharge
181 )
182 (
183 SELECT
184 [TripNumber] = CAST ([number] as nvarchar(50) ),
185 [DateKey] = [DimDates].[DateKey],
186 [LocationKey] = [DimLocation].[LocationKey],
187 [DriverKey] = [DimDriver].[DriverKey],
188 [TripMileage] = CAST (isNull([milage], 'Unknown') as decimal(18, 4)),
189 [TripCharge] = CAST (isNull([charge], 'Unknown') as decimal(18, 4))
190
191 FROM (([TaxiServiceDB-sdd65].[dbo].[Trip]
192 INNER JOIN DimDates ON [TaxiServiceDB-sdd65].[dbo].[Trip].[Date] = DimDates.
193 INNER JOIN DimLocation ON [TaxiServiceDB-sdd65].[dbo].[Trip].[Street_Code] =
194 INNER JOIN DimDriver ON [TaxiServiceDB-sdd65].[dbo].[Trip].[Driver_Id] =
195 )
196 GO
```