

```
1  --Check to ensure the database does not already exist before creating it.
2  USE [master]
3  GO
4
5  if EXISTS (SELECT name from sys.databases WHERE name = N'DWTaxiService-sdd65')
6      BEGIN
7          ALTER DATABASE [DWTaxiService-sdd65] SET SINGLE_USER WITH ROLLBACK
8              IMMEDIATE
9          DROP DATABASE [DWTaxiService-sdd65]
10     END
11 GO
12
13 CREATE DATABASE [DWTaxiService-sdd65]
14 GO
15
16
17 --Switch focus to new database
18
19 USE [DWTaxiService-sdd65]
20 GO
21
22 --Create Tables
23
24 --DimDriver Table
25 CREATE TABLE dbo.DimDriver
26 (
27     DriverKey int NOT NULL IDENTITY,
28     DriverId nchar(8) NOT NULL,
29     DriverName nvarchar(50) NOT NULL,
30     CONSTRAINT [PK_DimDriver] PRIMARY KEY ([DriverKey] ASC)
31 )
32
33 GO
34
35 --DimCity Table
36 CREATE TABLE dbo.DimCity
37 (
38     CityKey int NOT NULL IDENTITY,
39     CityId nchar(10) NOT NULL,
40     CityName nchar(50) NOT NULL,
41     CONSTRAINT [PK_DimCity] PRIMARY KEY ([CityKey] ASC)      --Double check
42 )
43
44 GO
45
46 --DimDates Table
47 CREATE TABLE dbo.DimDates
48 (
49     DateKey int NOT NULL IDENTITY,
50     [Date] datetime NOT NULL,
51     [DateName] nvarchar(50) NOT NULL,
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52     [Month] int NOT NULL,
53     [MonthName] nvarchar(50) NOT NULL,
54     [Year] int NOT NULL,
55     [YearName] nvarchar(50) NOT NULL,
56     CONSTRAINT [PK_DimDates] PRIMARY KEY ([DateKey] ASC)
57 )
58
59 GO
60
61 --DimLocation Table
62 CREATE TABLE dbo.DimLocation
63 (
64     LocationKey int NOT NULL IDENTITY,
65     CityKey int NOT NULL,
66     StreetId nchar(10) NOT NULL,
67     Street nchar(50) NOT NULL,
68     CONSTRAINT [PK_DimLocation] PRIMARY KEY ([LocationKey] ASC)
69 )
70
71 GO
72
73 --FactTrips Table
74 CREATE TABLE dbo.FactTrips
75 (
76     TripKey int NOT NULL IDENTITY,
77     TripNumber nvarchar(50) NOT NULL,
78     DateKey int NOT NULL,
79     LocationKey int NOT NULL,
80     DriverKey int NOT NULL,
81     TripMileage decimal(18, 4) NOT NULL,
82     TripCharge decimal(18, 4) NOT NULL,
83     CONSTRAINT [PK_FactTrips] PRIMARY KEY ([TripKey] ASC)
84 )
85
86 GO
87
88 --Define Foreign Keys
89 ALTER TABLE [dbo].[FactTrips] WITH CHECK ADD CONSTRAINT [FK_FactTrips_DimDates] ↗
90     FOREIGN KEY([DateKey])
91     REFERENCES [dbo].[DimDates] ([DateKey])
92     GO
93 ALTER TABLE [dbo].[FactTrips] WITH CHECK ADD CONSTRAINT ↗
94     [FK_FactTrips_DimLocation] FOREIGN KEY([LocationKey])
95     REFERENCES [dbo].[DimLocation] ([LocationKey])
96     GO
97 ALTER TABLE [dbo].[FactTrips] WITH CHECK ADD CONSTRAINT ↗
98     [FK_FactTrips_DimDriver] FOREIGN KEY([DriverKey])
99     REFERENCES [dbo].[DimDriver] ([DriverKey])
100     GO
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```
101 ALTER TABLE [dbo].[DimLocation] WITH CHECK ADD CONSTRAINT
    [FK_DimLocation_DimCity] FOREIGN KEY([CityKey])
102 REFERENCES [dbo].[DimCity] ([CityKey])
103 GO
104
105 --Notify if successful
106 Select Message = 'DWTaxiService-sdd65 OLAP Database successfully created !'
```