Use Case : I have mock data with road testing of a new car over different road features in different states.

I would like to display data from PowerBI using simple data modelling and built in quick measures

Code Example

Example Power BI chart:

Using built-in quick measures – Plot # occurrence of features for different states

Graphical user interface, application

Description automatically generated

Data :

USE RoadTrials

GO

/\*\*\*\*\*\* Script for SelectTopNRows command from SSMS  \*\*\*\*\*\*/

SELECT  ct.[id]

      ,t.[description]

      ,[state]

      ,f.[description]

  FROM [RoadTrials].[dbo].[CarTests] ct

INNER JOIN [RoadTrials].[dbo].[Feature] f on f.id=ct.featureId

INNER JOIN [RoadTrials].[dbo].[Trial] t on t.id=ct.trialId

Table

Description automatically generated with medium confidence

Script:

/ \* Tabe 1 \*/

CREATE TABLE [dbo].[CarTests](

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

       [trialId] [int] NOT NULL,

       [state] [varchar](2) NOT NULL,

       [featureId] [int] NOT NULL,

CONSTRAINT [PK\_CarTest] PRIMARY KEY CLUSTERED

(

       [id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

ALTER TABLE [dbo].[CarTests]  WITH CHECK ADD  CONSTRAINT [FK\_CarTest\_Feature] FOREIGN KEY([featureId])

REFERENCES [dbo].[Feature] ([id])

GO

ALTER TABLE [dbo].[CarTests] CHECK CONSTRAINT [FK\_CarTest\_Feature]

GO

ALTER TABLE [dbo].[CarTests]  WITH CHECK ADD  CONSTRAINT [FK\_CarTest\_Trail] FOREIGN KEY([trialId])

REFERENCES [dbo].[Trial] ([id])

GO

ALTER TABLE [dbo].[CarTests] CHECK CONSTRAINT [FK\_CarTest\_Trail]

GO

/ \* Table 2 \*/

CREATE TABLE [dbo].[Feature](

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

       [description] [varchar](50) NOT NULL,

CONSTRAINT [PK\_Feature] PRIMARY KEY CLUSTERED

(

       [id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO

/\* Table 3\*/

CREATE TABLE [dbo].[Trial](

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

       [description] [varchar](50) NOT NULL,

CONSTRAINT [PK\_Trial] PRIMARY KEY CLUSTERED

(

       [id] ASC

)WITH (PAD\_INDEX = OFF, STATISTICS\_NORECOMPUTE = OFF, IGNORE\_DUP\_KEY = OFF, ALLOW\_ROW\_LOCKS = ON, ALLOW\_PAGE\_LOCKS = ON, OPTIMIZE\_FOR\_SEQUENTIAL\_KEY = OFF) ON [PRIMARY]

) ON [PRIMARY]

GO