

PROJECT 2

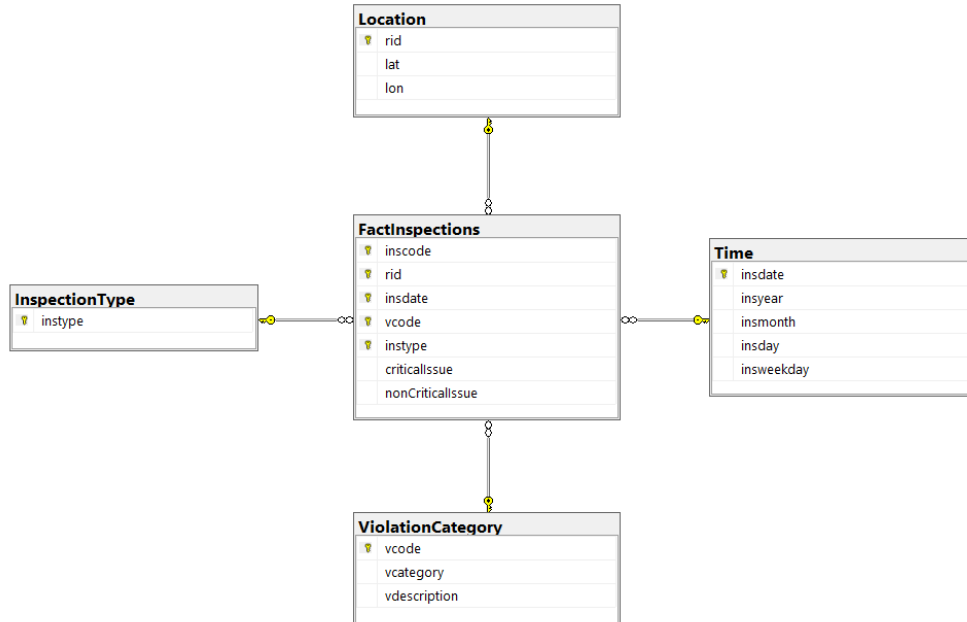
ΟΝ/ΜΟ:ΘΕΟΦΑΝΗΣ ΠΑΠΑΔΟΠΟΥΛΟΣ

ΑΜ:3200135

ΖΗΤΗΜΑ 1ο:

Παρακατω είναι ο κωδικας για τη δημιουργια βασης:

```
CREATE TABLE Inspections (  
    rid INT,  
    lat FLOAT,  
    lon FLOAT,  
    insdate DATE,  
    insyear INT,  
    insmonth INT,  
    insday INT,  
    insweekday INT,  
    inscode INT,  
    instype NVARCHAR(50),  
    criticalIssue INT,  
    nonCriticalIssue INT,  
    vcode INT,  
    vdescription NVARCHAR(255),  
    vcategory NVARCHAR(255)  
);  
BULK INSERT Inspections  
FROM 'C:\inspections_data\inspections_data.txt'  
WITH (DATAFILETYPE = 'widechar', FIRSTROW =2, FIELDTERMINATOR= '|',  
  
ROWTERMINATOR = '\n');
```



ZHTHMA 2o:

Παρακατω είναι ο κωδικας για τα ζητηματα της 2^{ης} ασκησης :

```

SELECT x.insyear, f1.instype, COUNT(*) AS NOF
FROM FactInspections f1
JOIN Time x ON f1.insdate = x.insdate
GROUP BY x.insyear, f1.instype
ORDER BY insyear DESC;
  
```

```

WITH InspectionIssues AS (
    SELECT
        f.rid AS RestaurantID,
        l.lat,
        l.lon,
        f.nonCriticalIssue,
        f.criticalIssue
    FROM FactInspections f
    JOIN Location l ON f.rid = l.rid
)
SELECT
    RestaurantID,
    CONCAT(lat, ',', lon) AS Coordinates,
    SUM(nonCriticalIssue) AS TotalNonCriticalIssues,
    SUM(criticalIssue) AS TotalCriticalIssues,
    SUM(nonCriticalIssue + criticalIssue) AS TotalIssues
FROM InspectionIssues
GROUP BY RestaurantID, lat, lon
ORDER BY TotalIssues DESC;
  
```

```
WITH InspectionDetails AS (  
    SELECT  
        t.insyear,  
        f.instype,  
        vc.vcategory,  
        f.criticalIssue  
    FROM FactInspections f  
    JOIN Time t ON f.insdate = t.insdate  
    JOIN ViolationCategory vc ON f.vcode = vc.vcode  
)  
SELECT  
    insyear,  
    instype,  
    vcategory,  
    SUM(criticalIssue) AS TotalCriticalIssues  
FROM InspectionDetails  
GROUP BY  
    ROLLUP(insyear, instype, vcategory);
```