Association Rules:

Cluster 0:

Min support : 65%   Min confidence: 65%

----------------------FREQUENT 1-ITEMSET-----------------------

[['M'], ['CAR\n'], ['FINE'], ['Slight'], ['2'], ['DRIVER']]

-----------------------FREQUENT 2-ITEMSET-----------------------

[['M', 'Slight'], ['FINE', 'M'], ['DRIVER', 'M']]

---------------------ASSOCIATION RULES------------------

RULES   SUPPORT CONFIDENCE LIFT

Rule# 1 : ['Slight'] ==> ['M']   82   94   1.086944

Rule# 2 : ['M'] ==> ['Slight']   82   86   0.912329

Rule# 3 : ['M'] ==> ['FINE']   69   72   0.765984

Rule# 4 : ['FINE'] ==> ['M']   69   95   1.324038

Rule# 5 : ['M'] ==> ['DRIVER']   65   69   0.729066

Rule# 6 : ['DRIVER'] ==> ['M']   65   93   1.313752

Cluster 1:

Min support : 85%   Min confidence: 85%

----------------------FREQUENT 1-ITEMSET------------------------

[['DRY'], ['FINE'], ['Slight'], ['DLT']]

-----------------------FREQUENT 2-ITEMSET-----------------------

[['DRY', 'FINE'], ['DLT', 'DRY'], ['DLT', 'FINE']]

-----------------------FREQUENT 3-ITEMSET-----------------------

[['DLT', 'DRY', 'FINE']]

---------------------ASSOCIATION RULES------------------

RULES   SUPPORT CONFIDENCE LIFT

Rule# 1 : ['DRY'] ==> ['FINE']   94   98   1.023764

Rule# 2 : ['FINE'] ==> ['DRY']   94   98   1.016887

Rule# 3 : ['DLT'] ==> ['DRY']   89   95   1.030960

Rule# 4 : ['DRY'] ==> ['DLT']   89   92   0.964600

Rule# 5 : ['DLT'] ==> ['FINE']   89   96   1.035724

Rule# 6 : ['FINE'] ==> ['DLT']   89   92   0.962548

Rule# 7 : ['DLT'] ==> ['DRY', 'FINE']   87   94   1.014357

Rule# 8 : ['DRY'] ==> ['DLT', 'FINE']   87   91   0.949066

Rule# 9 : ['FINE'] ==> ['DLT', 'DRY']   87   90   0.942690

Rule# 10 : ['DLT', 'FINE'] ==> ['DRY']   87   97   1.093907

Rule# 11 : ['DLT', 'DRY'] ==> ['FINE']   87   98   1.104041

Rule# 12 : ['DRY', 'FINE'] ==> ['DLT']   87   92   0.980121

Cluster 2:

Min support : 75%   Min confidence: 75%

--------------------FREQUENT 1-ITEMSET----------------------

[['CAR\n'], ['Slight'], ['F']]

----------------------FREQUENT 2-ITEMSET----------------------

[['CAR\n', 'Slight'], ['CAR\n', 'F'], ['F', 'Slight']]

----------------------FREQUENT 3-ITEMSET----------------------

[['CAR\n', 'F', 'Slight']]

--------------------ASSOCIATION RULES------------------

RULES   SUPPORT CONFIDENCE LIFT

Rule# 1 : ['Slight'] ==> ['CAR\n']   79   89   1.007553

Rule# 2 : ['CAR\n'] ==> ['Slight']   79   89   1.005227

Rule# 3 : ['F'] ==> ['CAR\n']   88   88   0.889117

Rule# 4 : ['CAR\n'] ==> ['F']   88   100   1.124711

Rule# 5 : ['F'] ==> ['Slight']   88   88   0.888090

Rule# 6 : ['Slight'] ==> ['F']   88   100   1.126012

Rule# 7 : ['F'] ==> ['CAR\n', 'Slight']   79   79   0.794661

Rule# 8 : ['Slight'] ==> ['CAR\n', 'F']   79   89   1.007553

Rule# 9 : ['CAR\n'] ==> ['F', 'Slight']   79   89   1.005227

Rule# 10 : ['CAR\n', 'Slight'] ==> ['F']   79   100   1.258398

Rule# 11 : ['CAR\n', 'F'] ==> ['Slight']   79   89   1.005227

Rule# 12 : ['F', 'Slight'] ==> ['CAR\n']   79   89   1.007553

Cluster 3:

Min support : 75%   Min confidence: 75%

----------------------FREQUENT 1-ITEMSET------------------------

[['DRY'], ['CAR\n'], ['FINE'], ['Slight'], ['ADL']]

----------------------FREQUENT 2-ITEMSET----------------------

[['DRY', 'FINE'], ['DRY', 'Slight'], ['CAR\n', 'FINE'], ['FINE', 'Slight']]

----------------------FREQUENT 3-ITEMSET----------------------

[['DRY', 'FINE', 'Slight']]

---------------------ASSOCIATION RULES------------------

RULES   SUPPORT CONFIDENCE LIFT

Rule# 1 : ['DRY'] ==> ['FINE']   92   98   1.046158

Rule# 2 : ['FINE'] ==> ['DRY']   92   96   1.013308

Rule# 3 : ['Slight'] ==> ['DRY']   83   93   1.048749

Rule# 4 : ['DRY'] ==> ['Slight']   83   89   0.948348

Rule# 5 : ['CAR\n'] ==> ['FINE']   75   95   1.197149

Rule# 6 : ['FINE'] ==> ['CAR\n']   75   78   0.825828

Rule# 7 : ['Slight'] ==> ['FINE']   85   95   1.065691

Rule# 8 : ['FINE'] ==> ['Slight']   85   89   0.933408

Rule# 9 : ['Slight'] ==> ['DRY', 'FINE']   82   92   1.031807

Rule# 10 : ['DRY'] ==> ['FINE', 'Slight']   82   87   0.933028

Rule# 11 : ['FINE'] ==> ['DRY', 'Slight']   82   86   0.903730

Rule# 12 : ['FINE', 'Slight'] ==> ['DRY']   82   96   1.134556

Rule# 13 : ['DRY', 'Slight'] ==> ['FINE']   82   98   1.171507

Rule# 14 : ['DRY', 'FINE'] ==> ['Slight']   82   89   0.962688

Cluster 4:

Min support : 78%   Min confidence: 78%

----------------------FREQUENT 1-ITEMSET------------------------

[['DLT'], ['CAR\n'], ['Slight'], ['F']]

-----------------------FREQUENT 2-ITEMSET-----------------------

[['DLT', 'Slight'], ['DLT', 'F'], ['CAR\n', 'DLT'], ['CAR\n', 'Slight'], ['F', 'Slight']]

---------------------ASSOCIATION RULES------------------

RULES   SUPPORT CONFIDENCE LIFT

Rule# 1 : ['DLT'] ==> ['Slight']   91   93   0.947980

Rule# 2 : ['Slight'] ==> ['DLT']   91   98   1.053348

Rule# 3 : ['DLT'] ==> ['F']   82   84   0.858279

Rule# 4 : ['F'] ==> ['DLT']   82   97   1.156873

Rule# 5 : ['DLT'] ==> ['CAR\n']   80   82   0.839251

Rule# 6 : ['CAR\n'] ==> ['DLT']   80   97   1.181899

Rule# 7 : ['Slight'] ==> ['CAR\n']   78   84   0.906861

Rule# 8 : ['CAR\n'] ==> ['Slight']   78   95   1.149361

Rule# 9 : ['F'] ==> ['Slight']   79   93   1.108327

Rule# 10 : ['Slight'] ==> ['F']   79   85   0.913657

Cluster 5:

Min support : 65%   Min confidence: 65%

----------------------FREQUENT 1-ITEMSET------------------------

[['CAR\n'], ['Slight'], ['F'], ['WET'], ['ADL']]

-----------------------FREQUENT 2-ITEMSET-----------------------

[['CAR\n', 'Slight'], ['CAR\n', 'WET'], ['Slight', 'WET'], ['ADL', 'CAR\n'], ['ADL', 'Slight'], ['ADL', 'WET']]

--------------------ASSOCIATION RULES------------------

RULES   SUPPORT CONFIDENCE LIFT

Rule# 1 : ['Slight'] ==> ['CAR\n']   70   81   0.939733

Rule# 2 : ['CAR\n'] ==> ['Slight']   70   88   1.112680

Rule# 3 : ['WET'] ==> ['CAR\n']   68   80   0.943699

Rule# 4 : ['CAR\n'] ==> ['WET']   68   86   1.082838

Rule# 5 : ['Slight'] ==> ['WET']   72   84   0.972137

Rule# 6 : ['WET'] ==> ['Slight']   72   85   1.003145

Rule# 7 : ['ADL'] ==> ['CAR\n']   69   78   0.877037

Rule# 8 : ['CAR\n'] ==> ['ADL']   69   87   1.104154

Rule# 9 : ['Slight'] ==> ['ADL']   77   89   1.033346

Rule# 10 : ['ADL'] ==> ['Slight']   77   86   0.971851

Rule# 11 : ['WET'] ==> ['ADL']   74   87   1.025437

Rule# 12 : ['ADL'] ==> ['WET']   74   83   0.934603

Main Data file::

Min support = 55, Min confidence=55

----------------------FREQUENT 1-ITEMSET-----------------------

[['DRY'], ['DLT'], ['CAR\n'], ['FINE'], ['Slight'], ['2'], ['M']]

----------------------FREQUENT 2-ITEMSET----------------------

[['DRY', 'FINE'], ['DRY', 'Slight'], ['DLT', 'DRY'], ['DLT', 'FINE'], ['DLT', 'Slight'], ['CAR\n', 'FINE'], ['CAR\n', 'Slight'], ['FINE', 'Slight'], ['2', 'Slight']]

----------------------FREQUENT 3-ITEMSET----------------------

[['DRY', 'FINE', 'Slight'], ['DLT', 'FINE', 'Slight'], ['CAR\n', 'FINE', 'Slight']]

---------------------ASSOCIATION RULES------------------

RULES   SUPPORT CONFIDENCE LIFT

Rule# 1 : ['DRY'] ==> ['FINE']   72   98   1.331464

Rule# 2 : ['FINE'] ==> ['DRY']   72   83   0.969834

Rule# 3 : ['Slight'] ==> ['DRY']   65   73   0.834222

Rule# 4 : ['DRY'] ==> ['Slight']   65   88   1.195743

Rule# 5 : ['DLT'] ==> ['DRY']   55   79   1.141438

Rule# 6 : ['DRY'] ==> ['DLT']   55   75   1.018539

Rule# 7 : ['DLT'] ==> ['FINE']   62   89   1.280035

Rule# 8 : ['FINE'] ==> ['DLT']   62   71   0.831984

Rule# 9 : ['DLT'] ==> ['Slight']   62   89   1.278402

Rule# 10 : ['Slight'] ==> ['DLT']   62   70   0.795859

Rule# 11 : ['CAR\n'] ==> ['FINE']   60   85   1.193629

Rule# 12 : ['FINE'] ==> ['CAR\n']   60   70   0.812170

Rule# 13 : ['Slight'] ==> ['CAR\n']   65   73   0.832121

Rule# 14 : ['CAR\n'] ==> ['Slight']   65   91   1.276830

Rule# 15 : ['Slight'] ==> ['FINE']   76   86   0.975270

Rule# 16 : ['FINE'] ==> ['Slight']   76   88   1.018237

Rule# 17 : ['Slight'] ==> ['2']   55   63   0.712898

Rule# 18 : ['2'] ==> ['Slight']   55   91   1.495596

Rule# 19 : ['Slight'] ==> ['DRY', 'FINE']   64   72   0.819379

Rule# 20 : ['DRY'] ==> ['FINE', 'Slight']   64   86   1.174467

Rule# 21 : ['FINE'] ==> ['DRY', 'Slight']   64   73   0.855478

Rule# 22 : ['FINE', 'Slight'] ==> ['DRY']   64   84   1.102788

Rule# 23 : ['DRY', 'Slight'] ==> ['FINE']   64   98   1.507226

Rule# 24 : ['DRY', 'FINE'] ==> ['Slight']   64   88   1.215613

Rule# 25 : ['DLT'] ==> ['FINE', 'Slight']   55   79   1.138281

Rule# 26 : ['Slight'] ==> ['DLT', 'FINE']   55   62   0.708628

Rule# 27 : ['FINE'] ==> ['DLT', 'Slight']   55   63   0.739848

Rule# 28 : ['DLT', 'FINE'] ==> ['Slight']   55   88   1.428545

Rule# 29 : ['FINE', 'Slight'] ==> ['DLT']   55   72   0.953731

Rule# 30 : ['DLT', 'Slight'] ==> ['FINE']   55   89   1.432197

Rule# 31 : ['Slight'] ==> ['CAR\n', 'FINE']   55   62   0.707001

Rule# 32 : ['CAR\n'] ==> ['FINE', 'Slight']   55   77   1.084843

Rule# 33 : ['FINE'] ==> ['CAR\n', 'Slight']   55   63   0.738149

Rule# 34 : ['FINE', 'Slight'] ==> ['CAR\n']   55   72   0.951541

Rule# 35 : ['CAR\n', 'Slight'] ==> ['FINE']   55   84   1.307087

Rule# 36 : ['CAR\n', 'FINE'] ==> ['Slight']   55   90   1.495658