## CS 260 - Database Systems

This lab will focus on Normalization.

You will be given an Excel spreadsheet of movie data. The data is contained in one large table called MovieTable. A small sample of that data is here:

Original Ta	Original Table					
MovieTab	le					
MovieID	Title	Rating	StarID	Star		
1	Gladiator	R	1	Russell Crowe		
2	A Beautiful Mind	PG-13	1,2	Russell Crowe, Jennifer Connelly		
3	Chicago	PG-13	3,4	Renee Zellweger, Catherine Zeta-Jones		
4	LOTR: Return of the King	PG-13	5,6	Viggo Mortensen, Elijah Wood		
5	Million Dollar Baby	PG-13	7,8,9	Clint Eastwood, Hilary Swank, Morgan Freeman		

The movie table given in the spreadsheet is NOT in normal form. It is your job to place it into 3<sup>rd</sup> normal form. Note that the spreadsheet has additional sheets in it. On these additional empty sheets you are to place the given data into 1<sup>st</sup>, 2<sup>nd</sup>, and 3<sup>rd</sup> normal form. This will probably require additional tables to be constructed. Simply place all the tables necessary for each normal form on the proper sheet. Additionally, for each of the normal form sheets, you are to mark the functional dependencies. please do this by coloring the cells under the table. Yellow for the determinants and green for the dependents. For example:

MovieTable MovieID	Title	Rating	RateRule
1	Gladiator	R	18 or older
2	A Beautiful Mind	PG-13	13 or older
3	Chicago	PG-13	13 or older

**Functional Dependencies:**