### 1)What genre is the movie CopyCat in?

>db.movies.find( {"Title":/Copycat/ },{\_id:false,Title:true,Genres:true})

{ "Genres" : [ "Crime", "Drama", "Horror", "Mystery", "Thriller" ], "Title" : "Copycat (1995)" }

### 2)what genre has the most movies?

> db.movies.aggregate( [ {'$unwind': '$Genres'},{ $group : { \_id : "$Genres",'count': {'$sum': 1} } },{'$sort':{'count':-1}},{'$limit': 3} ] )

{ "\_id" : "Drama", "count" : 5339 }

{ "\_id" : "Comedy", "count" : 3703 }

{ "\_id" : "Thriller", "count" : 1706 }

### 3)what tags did user 146 use to describe the movie "2001: A Space Odyssey”

> db.tags.find( {"UserID":"146", "MovieID" : "924" },{\_id:false,Tag:true})

{ "Tag" : "Arthur C. Clarke" }

{ "Tag" : "artificial intelligence" }

{ "Tag" : "based on a book" }

### 4)What are the top 5 movies with the highest avg rating?

> db.ratings.aggregate( [{ $group : { \_id : '$MovieID','average': {'$avg': '$Rating'} } },{$sort : {'average':-1}},{'$limit': 5} ])

{ "\_id" : "53355", "average" : 5 }

{ "\_id" : "64275", "average" : 5 }

{ "\_id" : "51209", "average" : 5 }

{ "\_id" : "42783", "average" : 5 }

{ "\_id" : "33264", "average" : 5 }

>db.movies.find({"MovieID":{$in:["53355","64275","51209","42783","33264"]}},{\_id:false,Title:true})

{ "Title" : "Satan's Tango (Sátántangó) (1994)" }

{ "Title" : "Shadows of Forgotten Ancestors (1964)" }

{ "Title" : "Fighting Elegy (Kenka erejii) (1966)" }

{ "Title" : "Sun Alley (Sonnenallee) (1999)" }

{ "Title" : "Blue Light, The (Das Blaue Licht) (1932)" }

### 5)What is the highest avg rating possible?

> db.ratings.aggregate( [{ $group : { \_id : '$MovieID','average': {'$avg': '$Rating'} } },{$sort : {'average':-1}},{'$limit': 1} ])

{ "\_id" : "51209", "average" : 5 }

### 6) Write 3 different queries of your choice to demonstrate that your data storage is working.

#### 6.1 Movies in 2008

> db.movies.find({"Title":/(2008)/},{\_id:false})

{ "Genres" : [ "Crime", "Drama", "Thriller" ], "MovieID" : "53207", "Title" : "88 Minutes (2008)" }

{ "Genres" : [ "Action", "Comedy", "Romance", "Thriller" ], "MovieID" : "55603", "Title" : "My Mom's New Boyfriend (2008)" }

{ "Genres" : [ "Comedy" ], "MovieID" : "55830", "Title" : "Be Kind Rewind (2008)" }

{ "Genres" : [ "Comedy", "Romance" ], "MovieID" : "56949", "Title" : "27 Dresses (2008)" }

{ "Genres" : [ "Action", "Adventure", "Fantasy" ], "MovieID" : "57326", "Title" : "In the Name of the King: A Dungeon Siege Tale (2008)" }

{ "Genres" : [ "Action", "Mystery", "Sci-Fi", "Thriller" ], "MovieID" : "57368", "Title" : "Cloverfield (2008)" }

{ "Genres" : [ "Comedy", "Crime", "Thriller" ], "MovieID" : "57370", "Title" : "Mad Money (2008)" }

{ "Genres" : [ "Horror", "Mystery", "Thriller" ], "MovieID" : "57520", "Title" : "One Missed Call (2008)" }

{ "Genres" : [ "Comedy", "Crime" ], "MovieID" : "57522", "Title" : "First Sunday (2008)" }

{ "Genres" : [ "Crime", "Thriller" ], "MovieID" : "57526", "Title" : "Untraceable (2008)" }

{ "Genres" : [ "Action", "Drama", "Thriller" ], "MovieID" : "57528", "Title" : "Rambo (2008)" }

{ "Genres" : [ "Comedy" ], "MovieID" : "57532", "Title" : "Meet the Spartans (2008)" }

{ "Genres" : [ "Drama", "Horror", "Thriller" ], "MovieID" : "57534", "Title" : "Eye, The (2008)" }

{ "Genres" : [ "Comedy" ], "MovieID" : "57536", "Title" : "Strange Wilderness (2008)" }

{ "Genres" : [ "Comedy", "Fantasy", "Romance" ], "MovieID" : "57538", "Title" : "Over Her Dead Body (2008)" }

{ "Genres" : [ "Action", "Adventure", "Comedy", "Fantasy", "Sci-Fi" ], "MovieID" : "57640", "Title" : "Hellboy II: The Golden Army (2008)" }

{ "Genres" : [ "Comedy", "Crime", "Drama" ], "MovieID" : "57669", "Title" : "In Bruges (2008)" }

{ "Genres" : [ "Comedy" ], "MovieID" : "57949", "Title" : "Welcome Home, Roscoe Jenkins (2008)" }

{ "Genres" : [ "Action", "Adventure", "Comedy", "Romance" ], "MovieID" : "57951", "Title" : "Fool's Gold (2008)" }

{ "Genres" : [ "Adventure", "Drama", "Sci-Fi", "Thriller" ], "MovieID" : "58025", "Title" : "Jumper (2008)" }

Type "it" for more

#### 6.2 Find which movies that UserID 2 rated as 5 score

> db.ratings.aggregate([{$match:{UserID:"2",Rating:5}}])

{ "\_id" : ObjectId("56b6da68d1ebeaeff47929c5"), "MovieID" : "110", "UserID" : "2", "Timestamp" : "868245777", "Rating" : 5 }

{ "\_id" : ObjectId("56b6da68d1ebeaeff47929c7"), "MovieID" : "260", "UserID" : "2", "Timestamp" : "868244562", "Rating" : 5 }

{ "\_id" : ObjectId("56b6da68d1ebeaeff47929ca"), "MovieID" : "590", "UserID" : "2", "Timestamp" : "868245608", "Rating" : 5 }

#### 6.3 How many tags the UserID 31 has generated?

> db.tags.find({UserID:"31"}).count()

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