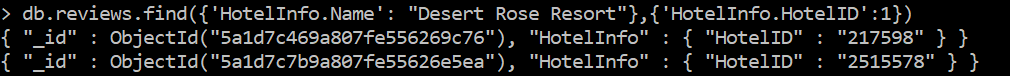
**Yelin shin (ys521)**

**WITH MONGODB**

**1. Find all reviews for a hotel ‘Desert Rose Resort’.**

> db.reviews.find({'HotelInfo.Name': "Desert Rose Resort"},{'HotelInfo.HotelID':1})

Result:



> db.reviews.aggregate([ {$match :{'\_id' : ObjectId("5a1d7c469a807fe556269c76")}}, {$project: {'HotelInfo.HotelID' : "217598",count: {$size: "$Reviews.ReviewID"}}}])

Result:



> db.reviews.aggregate([ {$match :{'\_id' : ObjectId("5a1d7c469a807fe556269c76")}}, {$project: {'HotelInfo.HotelID' : "217598",top: {$slice: ["$Reviews",5]}}}]).pretty()

Result:

{

"\_id" : ObjectId("5a1d7c469a807fe556269c76"),

"HotelInfo" : {

"HotelID" : "217598"

},

"top" : [

{

"Ratings" : {

"Service" : 5,

"Cleanliness" : "4",

"Overall" : 5,

"Value" : 5,

"Location" : "4",

"Rooms" : "4"

},

"AuthorLocation" : "",

"Title" : "“Best Deal for large families.”",

"Author" : "pb1bicdic",

"ReviewID" : "UR127021251",

"Content" : "So I found out about the hotel from searching this site. I found the reviews to be accurate and honest. When we check in, not five minutes into the hotel concierge gave us great info on free shows on the strip and the best way to maneuver from strip to downtown. If I could change anything it would be the hours of contenital breakfast. That time went so fast and the line so long that I only wanted to grab juice and leave. However, the staff was very accommodating and friendly that more than made up for it.",

"Date" : ISODate("2012-03-31T04:00:00Z")

},

{

"Ratings" : {

"Service" : 2,

"Cleanliness" : "2",

"Overall" : 2,

"Value" : 2,

"Sleep Quality" : "2",

"Rooms" : "2",

"Location" : "5"

},

"AuthorLocation" : "Sacramento, California",

"Title" : "“Not what I expected”",

"Author" : "Nancy I",

"ReviewID" : "UR126985135",

"Content" : "I am an elite owner with SHELL Vacations Club and this is one of ours. Usually SHELL properties are all GREAT, but this one leaves much to be desired! It was old and run-down, noisy, and had \"QUESTIONABLE\" employees and other guests! Not at all the nice atmosphere I expected or am used to with SHELL. It is a nice location...close to the strip...walking distance, but the place itself is almost a dive!",

"Date" : ISODate("2012-03-30T04:00:00Z")

},

{

"Ratings" : {

"Service" : 5,

"Cleanliness" : "5",

"Overall" : 5,

"Value" : 5,

"Sleep Quality" : "5",

"Rooms" : "5",

"Location" : "5"

},

"AuthorLocation" : "Milton, Canada",

"Title" : "“A nice piece of quiet away from the strip!”",

"Author" : "John E",

"ReviewID" : "UR126940047",

"Content" : "Before heading out to Vegas,for the first time,I checked reviews for this resort and it was rated in the top 10 in Vegas(Tripadvisor).My wife and myself chose this resort over others also because it had a kitchen,so we wouldn't have to buy food all the time,and because it was comprised of a number of 3 story buildings instead of overcrowded,smokey,noise filled towers.It was only a block from the strip and within walking distance to everything.We arrived in Vegas late but the 2 ladies at the reception desk were very helpful and without asking put us in a better,closer room to the front entrance.The service during our whole stay remained this way.There was no noise,everything,including the room, was very clean and breakfast was included everyday.Staff was very friendly and always willing to help.Don't get me wrong,we went to Vegas to see all the lights and glitz and glamor and we explored the strip thouroghly,but at night it was nice to come back to a place that felt more like home instead of always having to walk through a casino to find your elevator tucked away in a back corner.There was also a nice pool area(which we didn't use because it was a little cool)and if we ever go back to Vegas we will definitely be staying here again and have already recommended it to friends.",

"Date" : ISODate("2012-03-29T04:00:00Z")

},

{

"Ratings" : {

"Service" : 5,

"Cleanliness" : "5",

"Overall" : 4,

"Value" : 5,

"Sleep Quality" : "5",

"Rooms" : "5",

"Location" : "5"

},

"AuthorLocation" : "Singapore",

"Title" : "“Great value”",

"Author" : "staycation79",

"ReviewID" : "UR126931566",

"Content" : "The rooms are spacious, well equipped with lots of utensils, but we couldn't find a pair scissors. We used a pair which we brought along. It's a walk away from the noise and smoke of the casinos and we could understand why alot of the previous reviews appreciated that. Security is high, key cards not only open your room door but also the external doors to the block you are staying in. We did a bit of shopping at Las Vegas Town Square and appreciated the fact that Taxi drivers didn't have to go through the stop start traffic to drop us off at our hotel. Our room faced the road, but it didn't bother us as we slept really soundly. There's a free PC terminal with a printer to print your tour bookings and other coupons. We thought that was a nice touch. The breakfast buffet line was long, but it didn't bother us, since we would rather try the breakfast selections on the strip.",

"Date" : ISODate("2012-03-29T04:00:00Z")

},

{

"Ratings" : {

"Service" : 5,

"Cleanliness" : "4",

"Overall" : 5,

"Value" : 5,

"Sleep Quality" : "4",

"Rooms" : "5",

"Location" : "5"

},

"AuthorLocation" : "Calgary, Canada",

"Title" : "“\"Best off the Strip\"”",

"Author" : "Wanda M",

"ReviewID" : "UR126931045",

"Content" : "I decided to do a \"me\" break for a few days before heading to San Diego, and booked this hotel on-line and was pleasantly surprised. The 1 bedroom suite was perfect, and it was set away from all the noise on the strip. Its the perfect location for allowing one to enjoy the strip, but to also get away and tour Las Vegas. The parking is very convenient and its located just off some secondary roads that allow for easy access to the freeways and airport. The staff are very helpful and quite knowledgeable in directing you to the numerous tourist/shopping sites, as well as sharing cost saving tips on booking evening venues. There is a lovely pool and BBQ area, as well as a work out area for those that don't want to walk the strip. It also offered complimentary internet/WIFI access at no charge. The other great benefit of this hotel is the happy hour and great breakfast that was included in the cost....I will definitely be back to this facility...",

"Date" : ISODate("2012-03-29T04:00:00Z")

}

]

}

**2. Number of ratings for each hotel. Sort the results.**

> db.reviews.aggregate ([{$match:{"HotelInfo.Name": {"$exists":true, "$ne":null}}},{$project: {name: "$HotelInfo.Name",numRating: {$size: "$Reviews.Ratings"}}}, {$sort: {numRating: -1}}]).pretty()

Result:

{

"\_id" : ObjectId("5a1d7c799a807fe55626e410"),

"name" : "Bellagio Las Vegas",

"numRating" : 4936

}

{

"\_id" : ObjectId("5a1d7ce09a807fe5562773f2"),

"name" : "Bellagio Las Vegas",

"numRating" : 4778

}

{

"\_id" : ObjectId("5a1d7c839a807fe55626e9b6"),

"name" : "MGM Grand Hotel and Casino",

"numRating" : 4510

}

{

"\_id" : ObjectId("5a1d7ce29a807fe556277464"),

"name" : "MGM Grand Hotel and Casino",

"numRating" : 4373

}

{

"\_id" : ObjectId("5a1d7c779a807fe55626e2c0"),

"name" : "Venetian Resort Hotel Casino",

"numRating" : 3738

}

{

"\_id" : ObjectId("5a1d7ce79a807fe55627795c"),

"name" : "Venetian Resort Hotel Casino",

"numRating" : 3680

}

{

"\_id" : ObjectId("5a1d7c819a807fe55626e836"),

"name" : "Planet Hollywood Resort & Casino",

"numRating" : 3120

}

{

"\_id" : ObjectId("5a1d7cb39a807fe556272df0"),

"name" : "The Royal Playa del Carmen",

"numRating" : 3065

}

{

"\_id" : ObjectId("5a1d7c7f9a807fe55626e734"),

"name" : "The Mirage Hotel & Casino",

"numRating" : 3030

}

{

"\_id" : ObjectId("5a1d7ce09a807fe5562773da"),

"name" : "Planet Hollywood Resort & Casino",

"numRating" : 3024

}

{

"\_id" : ObjectId("5a1d7c839a807fe55626ea7c"),

"name" : "Treasure Island - TI Hotel & Casino",

"numRating" : 3008

}

{

"\_id" : ObjectId("5a1d7ce39a807fe5562774b2"),

"name" : "Treasure Island - TI Hotel & Casino",

"numRating" : 2932

}

{

"\_id" : ObjectId("5a1d7c939a807fe55626fce8"),

"name" : "Occidental Grand Xcaret & Royal Club",

"numRating" : 2920

}

{

"\_id" : ObjectId("5a1d7ce89a807fe556277974"),

"name" : "The Mirage Hotel & Casino",

"numRating" : 2911

}

{

"\_id" : ObjectId("5a1d7c7b9a807fe55626e506"),

"name" : "Wynn Las Vegas",

"numRating" : 2842

}

{

"\_id" : ObjectId("5a1d7c849a807fe55626eb06"),

"name" : "Excalibur Hotel & Casino",

"numRating" : 2814

}

{

"\_id" : ObjectId("5a1d7c7b9a807fe55626e5e4"),

"name" : "Signature at MGM Grand",

"numRating" : 2808

}

{

"\_id" : ObjectId("5a1d7caf9a807fe55627275a"),

"name" : "Wynn Las Vegas",

"numRating" : 2738

}

{

"\_id" : ObjectId("5a1d7cc09a807fe556274164"),

"name" : "Signature at MGM Grand",

"numRating" : 2728

}

{

"\_id" : ObjectId("5a1d7ce89a807fe55627797a"),

"name" : "Excalibur Hotel & Casino",

"numRating" : 2718

}

**3. Average overall ratings for each hotel. Sort the results**

> db.reviews.aggregate ([{$match:{"HotelInfo.Name": {"$exists":true, "$ne":null}}},{$project: {Hotel: "$HotelInfo.Name", avgOverallRating: {$avg: "$Reviews.Ratings.Overall"}}}, {$sort: {avgOverallRating: -1}}]).pretty()

Result:

{

"\_id" : ObjectId("5a1d7c219a807fe556266796"),

"Hotel" : "Freestanza Accommodation",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7c249a807fe556266c88"),

"Hotel" : "Petit Prince",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7c309a807fe556267cea"),

"Hotel" : "Residenza Ca Felice",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7c3b9a807fe556268e54"),

"Hotel" : "Hotel Konfidentiel",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7c469a807fe556269b74"),

"Hotel" : "La Piazzetta di Roma",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7c539a807fe55626afc0"),

"Hotel" : "Centro Pellegrini",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7c5f9a807fe55626c568"),

"Hotel" : "Central Park Suite",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7c649a807fe55626cba4"),

"Hotel" : "Central Park Suite",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7c6b9a807fe55626d23a"),

"Hotel" : "Central Park Suite",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7c719a807fe55626da62"),

"Hotel" : "Hotel Konfidentiel",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7c7c9a807fe55626e626"),

"Hotel" : "The Mansion at MGM Grand",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7c839a807fe55626e9f8"),

"Hotel" : "Extended StayAmerica San Diego-Mission Valley",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7cb39a807fe556272e4a"),

"Hotel" : "Conte House I",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7cb79a807fe5562733b4"),

"Hotel" : "Central Park Suite",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7cb89a807fe55627360c"),

"Hotel" : "Marini Park Hotel",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7cbc9a807fe556273c78"),

"Hotel" : "The Mansion at MGM Grand",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7cbe9a807fe556273e10"),

"Hotel" : "Eterna Roma",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7cc29a807fe5562744f4"),

"Hotel" : "Residenza Grandi Vedute",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7cca9a807fe556275508"),

"Hotel" : "Hostal Rio de Castro",

"avgOverallRating" : 5

}

{

"\_id" : ObjectId("5a1d7ccb9a807fe556275772"),

"Hotel" : "Hotel Aquino",

"avgOverallRating" : 5

}

Type "it" for more

**4. Show hotels with number of 5.0 overall ratings that they recieved.**

db.reviews.aggregate ( [ {$match : {"HotelInfo.Name" : {"$exists" : true, "$ne" : null}, "Reviews.Ratings.Overall" : {"$eq" :5}}}, {$project: { hotel\_name : "$HotelInfo.Name", countOverall5 : { $size : { $filter: { input : "$Reviews.Ratings.Overall", as : "overall", cond : {$eq : ["$$overall" , 5]} } } } }}, {$sort : {countOverall5: -1}}] ).pretty()

Result:

{

"\_id" : ObjectId("5a1d7c799a807fe55626e410"),

"hotel\_name" : "Bellagio Las Vegas",

"countOverall5" : 2791

}

{

"\_id" : ObjectId("5a1d7ce09a807fe5562773f2"),

"hotel\_name" : "Bellagio Las Vegas",

"countOverall5" : 2695

}

{

"\_id" : ObjectId("5a1d7cb39a807fe556272df0"),

"hotel\_name" : "The Royal Playa del Carmen",

"countOverall5" : 2319

}

{

"\_id" : ObjectId("5a1d7c779a807fe55626e2c0"),

"hotel\_name" : "Venetian Resort Hotel Casino",

"countOverall5" : 1974

}

{

"\_id" : ObjectId("5a1d7ce79a807fe55627795c"),

"hotel\_name" : "Venetian Resort Hotel Casino",

"countOverall5" : 1942

}

{

"\_id" : ObjectId("5a1d7c7b9a807fe55626e5e4"),

"hotel\_name" : "Signature at MGM Grand",

"countOverall5" : 1896

}

{

"\_id" : ObjectId("5a1d7c159a807fe5562651a0"),

"hotel\_name" : "Secrets Maroma Beach Riviera Cancun",

"countOverall5" : 1863

}

{

"\_id" : ObjectId("5a1d7cc09a807fe556274164"),

"hotel\_name" : "Signature at MGM Grand",

"countOverall5" : 1846

}

{

"\_id" : ObjectId("5a1d7c7b9a807fe55626e506"),

"hotel\_name" : "Wynn Las Vegas",

"countOverall5" : 1724

}

{

"\_id" : ObjectId("5a1d7caf9a807fe55627275a"),

"hotel\_name" : "Wynn Las Vegas",

"countOverall5" : 1646

}

{

"\_id" : ObjectId("5a1d7cd09a807fe556276048"),

"hotel\_name" : "Valentin Imperial Maya",

"countOverall5" : 1530

}

{

"\_id" : ObjectId("5a1d7c839a807fe55626e9b6"),

"hotel\_name" : "MGM Grand Hotel and Casino",

"countOverall5" : 1358

}

{

"\_id" : ObjectId("5a1d7ce29a807fe556277464"),

"hotel\_name" : "MGM Grand Hotel and Casino",

"countOverall5" : 1312

}

{

"\_id" : ObjectId("5a1d7c889a807fe55626edee"),

"hotel\_name" : "Floridays Resort Orlando",

"countOverall5" : 1271

}

{

"\_id" : ObjectId("5a1d7c859a807fe55626ebfc"),

"hotel\_name" : "Floridays Resort Orlando",

"countOverall5" : 1265

}

{

"\_id" : ObjectId("5a1d7c769a807fe55626e218"),

"hotel\_name" : "ARIA Resort & Casino",

"countOverall5" : 1243

}

{

"\_id" : ObjectId("5a1d7cc29a807fe55627464a"),

"hotel\_name" : "Floridays Resort Orlando",

"countOverall5" : 1206

}

{

"\_id" : ObjectId("5a1d7ce39a807fe556277494"),

"hotel\_name" : "ARIA Resort & Casino",

"countOverall5" : 1197

}

{

"\_id" : ObjectId("5a1d7c9c9a807fe556270ace"),

"hotel\_name" : "Secrets Capri Riviera Cancun",

"countOverall5" : 1196

}

{

"\_id" : ObjectId("5a1d7c7f9a807fe55626e734"),

"hotel\_name" : "The Mirage Hotel & Casino",

"countOverall5" : 1147

}

Type "it" for more

**5. Number of ratings given out per month/day of week.**

1. per month

> db.reviews.aggregate ([ {$unwind: "$Reviews"}, {$match:{"Reviews.Date": {"$exists":true, "$ne":null}}},{$project : {month:{$month: "$Reviews.Date"}}},{$group: {\_id: {month: "$month",year: "$year"},count:{$sum :1} }}]).pretty()

result:

{ "\_id" : { "month" : 3 }, "count" : 148357 }

{ "\_id" : { "month" : 6 }, "count" : 128391 }

{ "\_id" : { "month" : 11 }, "count" : 130001 }

{ "\_id" : { "month" : 9 }, "count" : 139987 }

{ "\_id" : { "month" : 8 }, "count" : 152877 }

{ "\_id" : { "month" : 7 }, "count" : 149957 }

{ "\_id" : { "month" : 2 }, "count" : 124231 }

{ "\_id" : { "month" : 10 }, "count" : 153594 }

{ "\_id" : { "month" : 12 }, "count" : 107248 }

{ "\_id" : { "month" : 5 }, "count" : 114000 }

{ "\_id" : { "month" : 1 }, "count" : 141046 }

{ "\_id" : { "month" : 4 }, "count" : 132267 }

1. per day of week

> db.reviews.aggregate ([ {$unwind: "$Reviews"}, {$match:{"Reviews.Date": {"$exists":true, "$ne":null}}},{$project : {dayOfWeek:{$dayOfWeek: "$Reviews.Date"}}},{$group: {\_id: {dayOfWeek: "$dayOfWeek"},count:{$sum :1} }}]).pretty()

Result:

{ "\_id" : { "dayOfWeek" : 7 }, "count" : 178605 }

{ "\_id" : { "dayOfWeek" : 3 }, "count" : 263769 }

{ "\_id" : { "dayOfWeek" : 6 }, "count" : 208368 }

{ "\_id" : { "dayOfWeek" : 2 }, "count" : 283292 }

{ "\_id" : { "dayOfWeek" : 1 }, "count" : 217323 }

{ "\_id" : { "dayOfWeek" : 5 }, "count" : 234453 }

{ "\_id" : { "dayOfWeek" : 4 }, "count" : 236146 }

**6. Number of reviews per author.**

> db.reviews.aggregate ([ {$unwind: "$Reviews"}, {$match:{"Reviews.Author": {"$exists":true, "$ne":null}}},{ $group : {\_id : { author\_name : "$Reviews.Author"} , count: { $sum: 1 }}}]).pretty()

{ "\_id" : { "author\_name" : "Yumbo" }, "count" : 1 }

{ "\_id" : { "author\_name" : "j0sele" }, "count" : 1 }

{ "\_id" : { "author\_name" : "viduido" }, "count" : 1 }

{ "\_id" : { "author\_name" : "purplemama" }, "count" : 1 }

{ "\_id" : { "author\_name" : "endlessummer" }, "count" : 1 }

{ "\_id" : { "author\_name" : "British\_Abroad" }, "count" : 1 }

{ "\_id" : { "author\_name" : "ssj0610" }, "count" : 1 }

{ "\_id" : { "author\_name" : "johnnymongoose" }, "count" : 1 }

{ "\_id" : { "author\_name" : "CheersDrive" }, "count" : 1 }

{ "\_id" : { "author\_name" : "JohnFromChicago" }, "count" : 1 }

{ "\_id" : { "author\_name" : "visitor123" }, "count" : 1 }

{ "\_id" : { "author\_name" : "The4Bears" }, "count" : 1 }

{ "\_id" : { "author\_name" : "davenportmom" }, "count" : 1 }

{ "\_id" : { "author\_name" : "mdr2006" }, "count" : 1 }

{ "\_id" : { "author\_name" : "Flanagans" }, "count" : 1 }

{ "\_id" : { "author\_name" : "viajo" }, "count" : 1 }

{ "\_id" : { "author\_name" : "travelbang" }, "count" : 1 }

{ "\_id" : { "author\_name" : "roycityboy" }, "count" : 1 }

{ "\_id" : { "author\_name" : "Dimplehp" }, "count" : 1 }

{ "\_id" : { "author\_name" : "Sid1449" }, "count" : 1 }

I also tried this query to find the count actually works well (checking the count is bigger than 10).

> db.reviews.aggregate ([ {$unwind: "$Reviews"}, {$match:{"Reviews.Author": {"$exists":true, "$ne":null}}},{ $group : {\_id : { author\_name : "$Reviews.Author"} , count: { $sum: 1 }}}, {$match: {count: {'$gt':10}}}]).pretty()

{ "\_id" : { "author\_name" : "beach\_specialists" }, "count" : 11 }

{ "\_id" : { "author\_name" : "prada777" }, "count" : 19 }

{ "\_id" : { "author\_name" : "moogie14a" }, "count" : 11 }

{ "\_id" : { "author\_name" : "goingblonde" }, "count" : 12 }

{ "\_id" : { "author\_name" : "er9804" }, "count" : 12 }

{ "\_id" : { "author\_name" : "rrdub" }, "count" : 12 }

{ "\_id" : { "author\_name" : "gstabc" }, "count" : 16 }

{ "\_id" : { "author\_name" : "lawyergirl07" }, "count" : 13 }

{ "\_id" : { "author\_name" : "Wisey\_7" }, "count" : 12 }

{ "\_id" : { "author\_name" : "miniwalt" }, "count" : 11 }

{ "\_id" : { "author\_name" : "shiroubi" }, "count" : 11 }

{ "\_id" : { "author\_name" : "withliberty" }, "count" : 12 }

{ "\_id" : { "author\_name" : "rdkell" }, "count" : 12 }

{ "\_id" : { "author\_name" : "AZTrainer" }, "count" : 13 }

{ "\_id" : { "author\_name" : "luv2travel022" }, "count" : 11 }

{ "\_id" : { "author\_name" : "merrytime" }, "count" : 13 }

{ "\_id" : { "author\_name" : "mikegodphx" }, "count" : 11 }

{ "\_id" : { "author\_name" : "DaveRuss" }, "count" : 11 }

{ "\_id" : { "author\_name" : "wawazatt" }, "count" : 15 }

{ "\_id" : { "author\_name" : "Bill W" }, "count" : 15 }

**7. count number of overall rating that is less than equal to 3 per hotel & sort**

> db.reviews.aggregate ( [ {$match : {"HotelInfo.Name" : {"$exists" : true, "$ne" : null}, "Reviews.Ratings.Overall" : {"$lte" :3}}}, {$project: { hotel\_name : "$HotelInfo.Name", countOverall3less : { $size : { $filter: { input : "$Reviews.Ratings.Overall", as : "overall", cond : {$lte : ["$$overall" , 3]} } } } }}, {$sort : {countOverall3less: -1}}] ).pretty()

Result:

{

"\_id" : ObjectId("5a1d7c5f9a807fe55626c5f2"),

"hotel\_name" : "Hotel Pennsylvania New York",

"countOverall3less" : 1728

}

{

"\_id" : ObjectId("5a1d7c649a807fe55626cc94"),

"hotel\_name" : "Hotel Pennsylvania New York",

"countOverall3less" : 1728

}

{

"\_id" : ObjectId("5a1d7c459a807fe556269a96"),

"hotel\_name" : "Hotel Pennsylvania New York",

"countOverall3less" : 1721

}

{

"\_id" : ObjectId("5a1d7c839a807fe55626e9b6"),

"hotel\_name" : "MGM Grand Hotel and Casino",

"countOverall3less" : 1488

}

{

"\_id" : ObjectId("5a1d7ce29a807fe556277464"),

"hotel\_name" : "MGM Grand Hotel and Casino",

"countOverall3less" : 1461

}

{

"\_id" : ObjectId("5a1d7c849a807fe55626eb06"),

"hotel\_name" : "Excalibur Hotel & Casino",

"countOverall3less" : 1401

}

{

"\_id" : ObjectId("5a1d7ce89a807fe55627797a"),

"hotel\_name" : "Excalibur Hotel & Casino",

"countOverall3less" : 1347

}

{

"\_id" : ObjectId("5a1d7c859a807fe55626ebf6"),

"hotel\_name" : "Monte Carlo Resort & Casino",

"countOverall3less" : 1140

}

{

"\_id" : ObjectId("5a1d7c869a807fe55626ecce"),

"hotel\_name" : "Circus Circus Hotel & Casino Las Vegas",

"countOverall3less" : 1140

}

{

"\_id" : ObjectId("5a1d7c819a807fe55626e836"),

"hotel\_name" : "Planet Hollywood Resort & Casino",

"countOverall3less" : 1114

}

{

"\_id" : ObjectId("5a1d7ce19a807fe55627740a"),

"hotel\_name" : "Circus Circus Hotel & Casino Las Vegas",

"countOverall3less" : 1103

}

{

"\_id" : ObjectId("5a1d7ce79a807fe556277962"),

"hotel\_name" : "Monte Carlo Resort & Casino",

"countOverall3less" : 1092

}

{

"\_id" : ObjectId("5a1d7ce09a807fe5562773da"),

"hotel\_name" : "Planet Hollywood Resort & Casino",

"countOverall3less" : 1072

}

{

"\_id" : ObjectId("5a1d7c799a807fe55626e410"),

"hotel\_name" : "Bellagio Las Vegas",

"countOverall3less" : 1006

}

{

"\_id" : ObjectId("5a1d7c609a807fe55626c808"),

"hotel\_name" : "Hudson New York",

"countOverall3less" : 985

}

{

"\_id" : ObjectId("5a1d7c669a807fe55626ce2c"),

"hotel\_name" : "Hudson New York",

"countOverall3less" : 985

}

{

"\_id" : ObjectId("5a1d7c499a807fe556269f22"),

"hotel\_name" : "Hudson New York",

"countOverall3less" : 978

}

{

"\_id" : ObjectId("5a1d7ce09a807fe5562773f2"),

"hotel\_name" : "Bellagio Las Vegas",

"countOverall3less" : 976

}

{

"\_id" : ObjectId("5a1d7c839a807fe55626ea7c"),

"hotel\_name" : "Treasure Island - TI Hotel & Casino",

"countOverall3less" : 920

}

{

"\_id" : ObjectId("5a1d7ce39a807fe5562774b2"),

"hotel\_name" : "Treasure Island - TI Hotel & Casino",

"countOverall3less" : 893

}

Type "it" for more

**8. Number of ratings given out per month but caring year also.**

> db.reviews.aggregate ([ {$unwind: "$Reviews"}, {$match : {"Reviews.Date" : {"$exists" : true, "$ne" : null}}}, {$group: { \_id : { month : {$month: "$Reviews.Date"}, year: { $year: "$Reviews.Date"}}, count: {$sum : 1}}}, {$sort :{ \_id : 1 }} ]).pretty()

Result:

{ "\_id" : { "month" : 1, "year" : 2002 }, "count" : 30 }

{ "\_id" : { "month" : 1, "year" : 2003 }, "count" : 390 }

{ "\_id" : { "month" : 1, "year" : 2004 }, "count" : 1793 }

{ "\_id" : { "month" : 1, "year" : 2005 }, "count" : 4401 }

{ "\_id" : { "month" : 1, "year" : 2006 }, "count" : 6963 }

{ "\_id" : { "month" : 1, "year" : 2007 }, "count" : 10102 }

{ "\_id" : { "month" : 1, "year" : 2008 }, "count" : 15153 }

{ "\_id" : { "month" : 1, "year" : 2009 }, "count" : 12127 }

{ "\_id" : { "month" : 1, "year" : 2010 }, "count" : 17325 }

{ "\_id" : { "month" : 1, "year" : 2011 }, "count" : 23776 }

{ "\_id" : { "month" : 1, "year" : 2012 }, "count" : 48986 }

{ "\_id" : { "month" : 2, "year" : 2002 }, "count" : 22 }

{ "\_id" : { "month" : 2, "year" : 2003 }, "count" : 377 }

{ "\_id" : { "month" : 2, "year" : 2004 }, "count" : 1749 }

{ "\_id" : { "month" : 2, "year" : 2005 }, "count" : 3776 }

{ "\_id" : { "month" : 2, "year" : 2006 }, "count" : 6044 }

{ "\_id" : { "month" : 2, "year" : 2007 }, "count" : 8482 }

{ "\_id" : { "month" : 2, "year" : 2008 }, "count" : 13085 }

{ "\_id" : { "month" : 2, "year" : 2009 }, "count" : 9738 }

{ "\_id" : { "month" : 2, "year" : 2010 }, "count" : 16731 }

Type "it" for more

**9. count number of reviews with the service =5 per hotel & sort**

> db.reviews.aggregate ( [ {$match : {"HotelInfo.Name" : {"$exists" : true, "$ne" : null}, "Reviews.Ratings.Service" : {"$eq" :5}}}, {$project: { hotel\_name : "$HotelInfo.Name", countservice5 : { $size : { $filter: { input : "$Reviews.Ratings.Service", as : "service", cond : {$eq : ["$$service" , 5]} } } } }}, {$sort : {countservice5: -1}}] ).pretty()

Result:

{

"\_id" : ObjectId("5a1d7c799a807fe55626e410"),

"hotel\_name" : "Bellagio Las Vegas",

"countservice5" : 2426

}

{

"\_id" : ObjectId("5a1d7ce09a807fe5562773f2"),

"hotel\_name" : "Bellagio Las Vegas",

"countservice5" : 2327

}

{

"\_id" : ObjectId("5a1d7cb39a807fe556272df0"),

"hotel\_name" : "The Royal Playa del Carmen",

"countservice5" : 2294

}

{

"\_id" : ObjectId("5a1d7c159a807fe5562651a0"),

"hotel\_name" : "Secrets Maroma Beach Riviera Cancun",

"countservice5" : 1996

}

{

"\_id" : ObjectId("5a1d7c7b9a807fe55626e5e4"),

"hotel\_name" : "Signature at MGM Grand",

"countservice5" : 1686

}

{

"\_id" : ObjectId("5a1d7cc09a807fe556274164"),

"hotel\_name" : "Signature at MGM Grand",

"countservice5" : 1639

}

{

"\_id" : ObjectId("5a1d7cd09a807fe556276048"),

"hotel\_name" : "Valentin Imperial Maya",

"countservice5" : 1609

}

{

"\_id" : ObjectId("5a1d7c779a807fe55626e2c0"),

"hotel\_name" : "Venetian Resort Hotel Casino",

"countservice5" : 1578

}

{

"\_id" : ObjectId("5a1d7ce79a807fe55627795c"),

"hotel\_name" : "Venetian Resort Hotel Casino",

"countservice5" : 1547

}

{

"\_id" : ObjectId("5a1d7c7b9a807fe55626e506"),

"hotel\_name" : "Wynn Las Vegas",

"countservice5" : 1500

}

{

"\_id" : ObjectId("5a1d7caf9a807fe55627275a"),

"hotel\_name" : "Wynn Las Vegas",

"countservice5" : 1421

}

{

"\_id" : ObjectId("5a1d7c839a807fe55626e9b6"),

"hotel\_name" : "MGM Grand Hotel and Casino",

"countservice5" : 1296

}

{

"\_id" : ObjectId("5a1d7ce29a807fe556277464"),

"hotel\_name" : "MGM Grand Hotel and Casino",

"countservice5" : 1245

}

{

"\_id" : ObjectId("5a1d7c9c9a807fe556270ace"),

"hotel\_name" : "Secrets Capri Riviera Cancun",

"countservice5" : 1209

}

{

"\_id" : ObjectId("5a1d7c769a807fe55626e218"),

"hotel\_name" : "ARIA Resort & Casino",

"countservice5" : 1194

}

{

"\_id" : ObjectId("5a1d7c889a807fe55626edee"),

"hotel\_name" : "Floridays Resort Orlando",

"countservice5" : 1167

}

{

"\_id" : ObjectId("5a1d7c859a807fe55626ebfc"),

"hotel\_name" : "Floridays Resort Orlando",

"countservice5" : 1161

}

{

"\_id" : ObjectId("5a1d7ce39a807fe556277494"),

"hotel\_name" : "ARIA Resort & Casino",

"countservice5" : 1149

}

{

"\_id" : ObjectId("5a1d7c799a807fe55626e350"),

"hotel\_name" : "Tropicana Las Vegas",

"countservice5" : 1107

}

{

"\_id" : ObjectId("5a1d7cc29a807fe55627464a"),

"hotel\_name" : "Floridays Resort Orlando",

"countservice5" : 1104

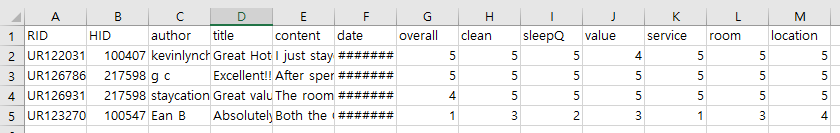
}

Type "it" for more

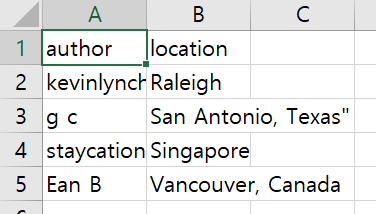
**WITH MYSQL**

I have 3 tables called review, hotel, and author.

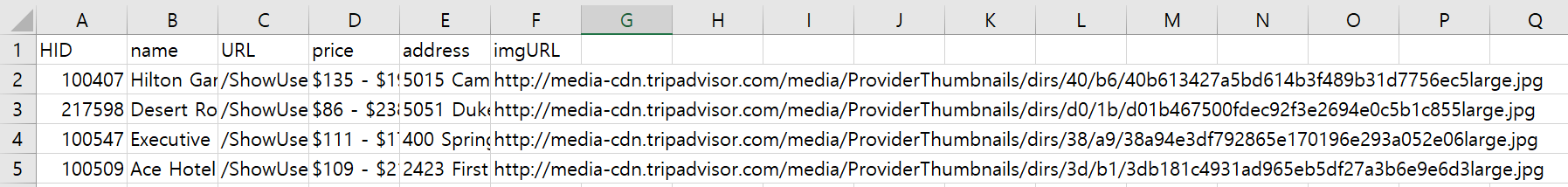
Review.csv



Author.csv



Hotel.csv



I put ‘ACE hotel’ with no reviews on review.csv

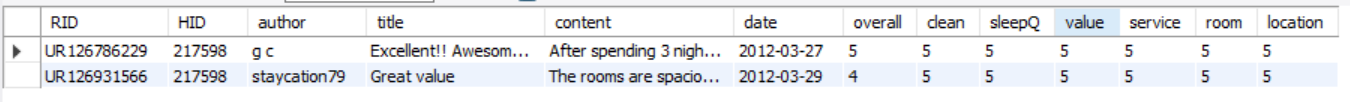
**1. Find all reviews for a hotel ‘Desert Rose Resort’.**

select r.\*

from review r, hotel h

where h.name = "Desert Rose Resort" and r.HID = h.﻿HID

result



**2. Number of ratings for each hotel. Sort the results.**

select h.name, count(\*) as count

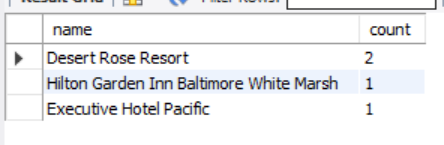
from review r, hotel h

where h.﻿HID = r.HID

group by r.HID

order by count desc

result:



**3. Average overall ratings for each hotel. Sort the results**

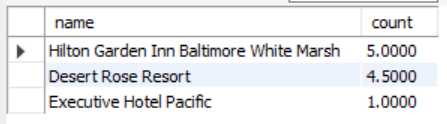
select h.name, avg(r.overall) as count

from review r, hotel h

where h.﻿HID = r.HID

group by r.HID

order by count desc



**4. Show hotels with number of 5.0 overall ratings that they recieved.**

select h1.name, coalesce(A.count, 0) as count

from hotel h1

left join (select h.name, count(r.RID) as count, h.HID

from hotel h

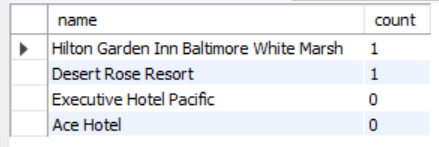
left join review r on r.HID = h.HID and r.overall = 5

group by r.HID) as A

on A.HID = h1.HID

order by count desc

result:



**5. Number of ratings given out per month/day of week.**

1. Per month

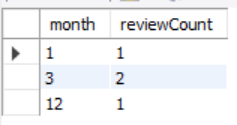
select month(r.date) as month, count(\*) as reviewCount

from review r

group by month

order by month

result:



1. Day of week

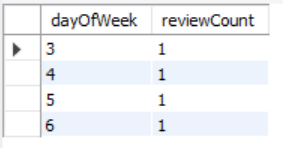
select dayOfweek(r.date) as dayOfWeek, count(\*) as reviewCount

from review r

group by dayOfWeek

order by dayOfWeek

result:



**6. Number of reviews per author.**

select r.author, count(\*) as reviewCount

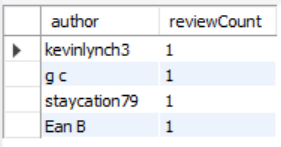
from review r, author

where r.author = author.﻿author

group by r.author

order by reviewCount desc

result:



**7. count number of overall rating that is less than equal to 3 per hotel & sort**

select h1.name, coalesce(A.count, 0) as count

from hotel h1

left join (select h.name, count(r.RID) as count , h.HID

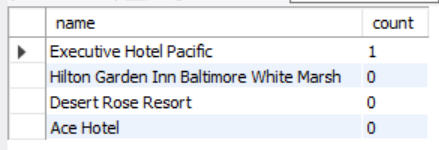
from hotel h

left join review r on r.HID = h.HID and r.overall <= 3

group by r.HID) as A

on A.HID = h1.HID

order by count desc;



**8. Number of ratings given out per month but caring year also.**

select month(r.date) as month, year(r.date) as year, count(\*) as reviewCount

from review r

group by month, year

order by month, year;



**9. count number of reviews with the service =5 per hotel & sort**

select h1.name, coalesce(A.count, 0) as count

from hotel h1

left join (select h.name, count(r.RID) as count, h.HID

from hotel h

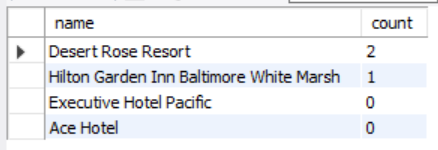
left join review r on r.HID = h.HID and r.service = 5

group by r.HID) as A

on A.HID = h1.HID

order by count desc;

result:



**Conclusion:**

Since I did not export the whole json data into csv, I cannot talk about my experience of performance between mongoDB and mySQL because the performance time is dependent on size of my data.

However, there is a big difference between mongoDB and mySQL in using data. In mongoDB, we only need one file to import to my database. Our review object is nested object which seems like less user friendly than mySQL table, but the good thing is I don’t have to care about dividing it into several tables as mySQL need.

Also, for query-wise, I think mySQL query is easier to understand, but mongoDB is more straight-forward because it doesn’t have bunch of different tables. Also, for pattern 4, mySQL need to use left join twice to present all the hotels name but mongoDB doesn’t. But, since we learn and use mySQL syntax more in class, I feel mySQL is easier to use for me.