**Aggregating Airlines Collection**

1. db.airlines.aggregate([{$group:{\_id:"$class",total:{$sum:1}}},{$project:{\_id:0,class:"$\_id",total:"$total"}}])

{ "class" : "F", "total" : 140343 }

{ "class" : "L", "total" : 23123 }

{ "class" : "P", "total" : 5683 }

{ "class" : "G", "total" : 17499 }

1. db.airlines.aggregate([{$match:{destCountry:{$ne:"UnitedStates"}}},{$group:{\_id:"$destCity",avgPassengers:{$avg:"$passengers"}}},{$sort:{avgPassengers:-1}},{$limit:3},{$project:{\_id:0,avgPassengers:"$avgPassengers",city:"$\_id",}}])

{ "avgPassengers" : 8052.380952380952, "city" : "Abu Dhabi, United Arab Emirates" }

{ "avgPassengers" : 7743.661683713612, "city" : "Atlanta, GA" }

{ "avgPassengers" : 7176.596638655462, "city" : "Dubai, United Arab Emirates" }

1. db.airlines.aggregate([{$match: {destCountry: {$eq: "Latvia"}}}, {$group: {\_id: "$destCountry",carriers: {$addToSet: "$carrier"}}}])

{ "\_id" : "Latvia", "carriers" : [ "Uzbekistan Airways", "Blue Jet SP Z o o", "JetClub AG" ] }

1. db.airlines.aggregate([{$match: {destCountry: {$in: ["Greece", "Italy", "Spain"]},originCountry: {$eq: "United States"}}}, {$group: {\_id: "$carrier",total: {$sum: "$passengers"}}}, {$sort: {total: -1}}, {$limit: 10}, {$skip: 3}])

{ "\_id" : "Compagnia Aerea Italiana", "total" : 280256 }

{ "\_id" : "United Air Lines Inc.", "total" : 229936 }

{ "\_id" : "Emirates", "total" : 100903 }

{ "\_id" : "Air Europa", "total" : 94968 }

{ "\_id" : "Meridiana S.p.A", "total" : 20308 }

{ "\_id" : "Norwegian Air Shuttle ASA", "total" : 13344 }

{ "\_id" : "VistaJet Limited", "total" : 183 }

1. db.airlines.aggregate([{$match: {originCountry: {$eq: "United States"}}}, {$group: {\_id: {originCity: "$originCity",originState: "$originState"},total: {$sum: "$passengers"}}}, {$sort: {total: -1}}, {$group: {\_id: "$\_id.originState",city: {$first: "$\_id.originCity"},totalPassengers: {$first: "$total"}}}, {$sort: {\_id: 1}}, {$limit: 5}, {$project: {\_id: 0,totalPassengers: "$totalPassengers",location: {state: "$\_id",city: "$city"}}}])

{ "totalPassengers" : 760120, "location" : { "state" : "Alabama", "city" : "Birmingham, AL" } }

{ "totalPassengers" : 1472404, "location" : { "state" : "Alaska", "city" : "Anchorage, AK" } }

{ "totalPassengers" : 13152753, "location" : { "state" : "Arizona", "city" : "Phoenix, AZ" } }

{ "totalPassengers" : 571452, "location" : { "state" : "Arkansas", "city" : "Little Rock, AR" } }

{ "totalPassengers" : 23701556, "location" : { "state" : "California", "city" : "Los Angeles, CA" } }

**Aggregate Enron Collection**

db.enron.aggregate([{'$project': {'from': '$headers.From', 'to': '$headers.To'}}, {'$unwind': {'path': '$to'}}, {'$group': {'\_id': {'id': '$\_id', 'from': '$from', 'to': '$to'}}}, {'$group': {'\_id': {'from': '$\_id.from', 'to': '$\_id.to'}, 'total': {'$sum': 1}}}, {'$sort': {'total': -1}}, {'$limit': 1}, {'$project': {'\_id': 0,'from': '$\_id.from','to': '$\_id.to','emailCount': '$total'}}],{ allowDiskUse: true })

{ "from" : "susan.mara@enron.com", "to" : "jeff.dasovich@enron.com", "emailCount" : 750 }