**LAB 2 - MONGO DB QUERY LOGS (Shell execution)**

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**SCENARIO 1 - NO OF MOVIES WATCHED PER COUNTRY**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate ([  { $project : {custCountry:"$cust\_country"} },  { $group : {\_id: { custCountry:"$custCountry"},movies\_watched: {$sum: 1}}},  {$sort :{movies\_watched:-1}}  ]) |

**SCENARIO 2 - NO OF MOVIES RELEASED PER YEAR**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$match:{"rank\_id":{$nin:[null,""]}}},  {$group:{\_id: {year:"$Year"}, movies: { $addToSet: "$rank\_id" }}},  {$project:{ year:1, uniqueCount:{$size:"$movies"}}},  {$sort:{uniqueCount:-1}}  ]) |

**SCENARIO 3 - TOP 5 EMPLOYEES WHO HAVE RESPONDED TO MOST COMPLAINTS**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| **db.smd.aggregate([**  **{$match:{ "complaint\_id":{$nin:[null,""]}}},**  **{ $group:**  **{ \_id: {employeeId:"$employeeId", employeeName:{$concat:["$emp\_first\_name","","$emp\_middle\_name","","$emp\_last\_name"]}},**  **compl:{$addToSet:"$complaint\_id"}, cust:{$addToSet:"$customer\_id"}**  **} },**  **{ $project:{ employeeId:1,employeeName:1,uniqueCount:{$size:"$compl"} }},**  **{$sort:{uniqueCount: -1}},**  **{$limit : 5}**  **]).pretty()** |

**SCENARIO 4 - NO OF CUSTOMERS PER COUNTRY**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$group:{\_id:{"custcountry" : "$cust\_country"},uniqueCount: {$addToSet: "$customer\_id"}}},  {$project:{"custcountry":1,uniqueCustomerCount:{$size:"$uniqueCount"}} }  ]); |

**SCENARIO 5 - NO OF COMPLAINTS RECORDED PER COMPLAINT CATEGORY**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$match: { "complaint\_id":{$nin:[null]}}},  {$group:{\_id: {complaintCategory:"$complaint\_category"}, uniqueCount: { $addToSet: "$customer\_id" }}},  {$project:{ complaintCategory:1, count:{$size:"$uniqueCount"}}},  {$sort:{ count: -1}}  ]) |

**SCENARIO 6 - COMPLAINTS CLOSED PER MONTH**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$match:{"close\_date":{$nin:[null,""]}}},  {$group:{\_id:{closed\_month:{$month:"$close\_date"}},number:{$addToSet:"$complaint\_id"}}},  {$project:{closed\_month:1,totalComplaints:{$size:"$number"}}},  ]) |

**SCENARIO 7 – COMPLAINTS CREATED PER MONTH**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$match:{"complaint\_creation\_date":{$nin:[null,""]}}},  {$group:{\_id:{creation\_month:{$month:"$complaint\_creation\_date"}},number:{$addToSet:"$complaint\_id"}}},  {$project:{creation\_month:1,totalComplaints:{$size:"$number"}}},  ]) |

**SCENARIO 8 - PAYMENT MADE PER MONTH**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$match:{"total\_amount":{$nin:[null,""]}}},  {$project:{payment\_date:"$payment\_date",amount:"$total\_amount"}},  {$group:{\_id:{Month:{$month:"$payment\_date"}},total\_count:{$sum:"$amount"}}},  {$sort:{"\_id.Month":1}}  ]) |

**SCENARIO 9 - TOP 10 CUSTOMERS BASED ON MOVIES WATCHED**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$match:{ "user\_id":{$nin:[null,""]}}},  {$group:{ \_id: {customerName:{$concat:["$cust\_first\_name"," ","$cust\_middle\_name"," ","$cust\_last\_name"]}}, rank: { $addToSet: "$rank\_id" }}},  {$project:{ customerName:1, moviesWatched:{$size:"$rank"}}},  {$sort:{ moviesWatched:-1}},  {$limit:10}  ]) |

**SCENARIO 10 - TOP 10 DIRECTORS BASED ON USER WATCH HISTORY**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$match:{ "Director":{$nin:[null,""]}}},  {$group:{ \_id: {director:"$Director"}, cust: { $addToSet: "$user\_id" },rank:{$addToSet:"$rank\_id"}}},  {$project:{ director:1, count: { $size: "$rank" }}},  {$sort:{ count:-1}},  {$limit:5}  ]) |

**SCENARIO 11 - COMPLAINTS BASED ON SEVERITY**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$match: { "complaint\_id":{$nin:[null]}}},  {$group:{ \_id: {complaintSeverity:"$severity"}, totalCount: { $addToSet: "$complaint\_id" }}},  {$project:{ complaintSeverity:1,totalComplaints:{$size:"$totalCount"}}},  {$sort:{ totalComplaints: 1}}  ]) |

**SCENARIO 12 - AVERAGE SALARY BASED ON DESIGNATION**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$match:{"emp\_id":{$nin:[null,""]}}},  {$project:{salary:"$emp\_salary", designation:"$emp\_position"}},  {$group:{ \_id: {designation:"$designation"}, average\_salary: { $avg: "$salary" }}},  {$sort:{average\_salary:1}}  ]).pretty() |

**SCENARIO 13 - EMPLOYEES PER DESIGNATION BASED ON EMPLOYMENT STATUS**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$match:{"emp\_id":{$nin:[null,""]}}},  {$group:{ \_id: {status:"$employment\_satus",pos:"$emp\_position"}, total\_employee: { $addToSet: "$emp\_id" }}},  {$project:{ status:1, numberOfEmployees:{$size:"$total\_employee"}}},  {$sort:{pos:1,status:1}}  ]) |

**SCENARIO 14 - 5 LATEST CLOSED COMPLAINTS**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$match:{"resolution\_status":{$in:["Closed"]}}},  {$project:{compId:"$complaint\_id", compCloseDate:"$close\_date"}},  {$group: {  \_id: {compId:"$compId",compCloseDate:"$compCloseDate"},  count: { $addToSet: "$compId" }}},  {$sort:  {"\_id.compCloseDate":-1}},  {$limit:5},  {$project: { \_id:1}}]) |

**SCENARIO 15 – MOST PREFERRED SCREENS BY THE CUSTOMERS**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$match:{ "screen\_no":{$nin:[null,""]}}},  {$group:{ \_id: {screen:"$screen\_no"}, customer: { $addToSet: "$customer\_id" }}},  {$project:{ "screen":1, used:{$size:"$customer"}}},  {$sort:{ used: -1}}  ]) |

**SCENARIO 16 – TOP HIGHEST GROSSING MOVIES**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$match:{ "Revenue (Millions)":{$nin:[null,""]}}},  {$project:{ title:"$Title", rank:"$rank\_id", revenue:"$Revenue (Millions)"}},  {$group:{ \_id: {rank:"$rank",title:"$title"}, totalRevenue: { $addToSet: "$revenue" }}},  {$sort:{ totalRevenue: -1 }},  {$limit:20},  {$project:{ "\_id.title":1, "totalRevenue":1}}]) |

**SCENARIO 17 – TOP 5 MOST RATED MOVIES**

**QUERY & RESULT (SHELL EXECUTION):**

|  |
| --- |
| db.smd.aggregate([  {$match:{ "Title":{$nin:[null,""]}}},  {$project:{ title:"$Title", rating:"$Rating", rank:"$rank\_id", cust:"$customer\_id"}},  {$group:{ \_id: {title:"$title"}, rating: { $sum: "$rating" }, cust:{ $addToSet:"$cust" }}},  {$project:{ "\_id.title":1, "rating": 1}},  {$sort:{ rating: -1}},  {$limit:5}]) |

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