# Query

```
db.data.aggregate([
  {$unwind  : "$player_data"},
  {$unwind  : "$Game_Feed"},

  {$match   : {"Game_Feed.Outcome": {"$regex":"End"}} },
  {$project : { "player_data.name":1,
                "Role"   : { $substr: [ "$player_data.Role", 1, 4 ]}   ,
                "Result" : { $substr: [ "$Game_Feed.Action", 0, 4 ]}   }},
  {$project : { "player_data.name":1,
                "Win": {$cond: [{$eq:["$Result","$Role"]},1,0]}     }},
  {$group   : {"_id":"$player_data.name",
                "Played":{"$sum":1},
                "Wins": {$sum : "$Win" }}},
  {$project : {"_id":1,
                "Played":1,
                "Wins":1,
                "Win Rate":{$multiply:[{$divide:["$Wins","$Played"]} ,100]}}}
])
```

Output

```
{ "_id" : "Stunlock", "Played" : 22, "Wins" : 10, "Win Rate" : 45.45454545454545 }
{ "_id" : "Emily", "Played" : 19, "Wins" : 9, "Win Rate" : 47.368421052631575 }
{ "_id" : "Kibler", "Played" : 40, "Wins" : 24, "Win Rate" : 60 }
{ "_id" : "julie", "Played" : 4, "Wins" : 4, "Win Rate" : 100 }
{ "_id" : "Seabats", "Played" : 26, "Wins" : 9, "Win Rate" : 34.61538461538461 }
{ "_id" : "Nate", "Played" : 2, "Wins" : 1, "Win Rate" : 50 }
{ "_id" : "Bonde", "Played" : 2, "Wins" : 1, "Win Rate" : 50 }
{ "_id" : "Iroknight", "Played" : 10, "Wins" : 7, "Win Rate" : 70 }
{ "_id" : "LadyAtarka", "Played" : 101, "Wins" : 52, "Win Rate" : 51.48514851485149 }
{ "_id" : "TheAsianAvenger", "Played" : 13, "Wins" : 4, "Win Rate" : 30.76923076923077
{ "_id" : "Aberdasher", "Played" : 4, "Wins" : 3, "Win Rate" : 75 }
{ "_id" : "synthe", "Played" : 5, "Wins" : 5, "Win Rate" : 100 }
{ "_id" : "Stranjak", "Played" : 3, "Wins" : 2, "Win Rate" : 66.66666666666666 }
{ "_id" : "TomRoss", "Played" : 14, "Wins" : 7, "Win Rate" : 50 }
{ "_id" : "Andrew", "Played" : 145, "Wins" : 85, "Win Rate" : 58.620689655172406 }
{ "_id" : "GGards", "Played" : 5, "Wins" : 4, "Win Rate" : 80 }
{ "_id" : "DoubleFried", "Played" : 81, "Wins" : 46, "Win Rate" : 56.79012345679012 }
{ "_id" : "dcsports8", "Played" : 46, "Wins" : 26, "Win Rate" : 56.52173913043478 }
{ "_id" : "LSV", "Played" : 140, "Wins" : 83, "Win Rate" : 59.285714285714285 }
{ "_id" : "Ambiance", "Played" : 7, "Wins" : 4, "Win Rate" : 57.14285714285714 }
Type "it" for more
```

# Query

```
db.data.aggregate([
  {$unwind  : "$player_data"},
  {$group   : {"_id": { Player: "$player_data.name",
                        Color : "$player_data.Color"},

               "Total": { $sum : 1 }      }},
  {$group   : { _id   : "$_id.Player",
               Colors: {$push: {Color: "$_id.Color", Count:"$Total"}}   }},
  {$unwind  : "$Colors" },
  {$sort    : { "Colors.Count": -1 } },
  {$group   : { _id: "$_id", details: { $push : "$Colors" }     }},
  {$project : {"_id":1 , "colors": { $first: "$details"}     }},
  {$project : {"_id":1 , "Prefrence": "$colors.Color"     }}

])
```

# Output

```
{ "_id" : "Sam", "Prefrence" : "Black" }
{ "_id" : "Platypus", "Prefrence" : "Blue" }
{ "_id" : "Stunlock", "Prefrence" : "White" }
{ "_id" : "Emily", "Prefrence" : "Red" }
{ "_id" : "Eric", "Prefrence" : "Lime" }
{ "_id" : "julie", "Prefrence" : "Brown" }
{ "_id" : "DaveWilliams", "Prefrence" : "Black" }
{ "_id" : "Pojo", "Prefrence" : "Pink" }
{ "_id" : "Bonde", "Prefrence" : "Orange" }
{ "_id" : "Squirrel_Loot", "Prefrence" : "Blue" }
{ "_id" : "LeeSharpe", "Prefrence" : "Red" }
{ "_id" : "Kyle", "Prefrence" : "Pink" }
{ "_id" : "Nairbly", "Prefrence" : "Lime" }
{ "_id" : "Saku", "Prefrence" : "Pink" }
{ "_id" : "GrahamLRR", "Prefrence" : "Cyan" }
{ "_id" : "coco", "Prefrence" : "Purple" }
{ "_id" : "SamSherman", "Prefrence" : "Blue" }
{ "_id" : "Wolf", "Prefrence" : "Orange" }
{ "_id" : "Keaton", "Prefrence" : "Black" }
{ "_id" : "Trotske", "Prefrence" : "White" }
Type "it" for more
```

# Query for colors subset

```
db.data.aggregate([
   {$unwind  : "$player_data"},
   {$group   : {"_id": { Player: "$player_data.name",
                         Color : "$player_data.Color"},

                "Total": { $sum : 1 }      }},
   {$group   : { _id   : "$_id.Player",
                Colors: {$push: {Color: "$_id.Color", Count:"$Total"}}    }},
   {$unwind  : "$Colors" },
   {$sort    : { "Colors.Count": -1 } },
   {$group   : { _id: "$_id", details: { $push : "$Colors" }     }},
   {$project : {"_id":1 , "colors": { $first: "$details"}     }},
   {$project : {"_id":1 , "Prefrence": "$colors.Color"     }},
   {$out     : "Color_data"}
])
```

Saves the results of the query to a collection
called 'color_data'

# mongoexport for colors subset

```
mongoexport --db=assignment --collection=Color_data --type=csv --fields=_id,Prefrence
--out=C:\Users\rrsha\Documents\PythonScripts\Assignment-folder/output/color_data.csv
```

Substitute this with the path where you want to store your data

```
D:\Software\Mongo\bin>mongoexport --db=assignment --collection=Color_data --type=csv --fields=_id,Prefrence --out=C:\Users\rrsha\Documents\PythonScripts\Assignment-folder/output/color_data.csv
2022-07-24T20:57:26.800+0530    connected to: mongodb://localhost/
2022-07-24T20:57:26.864+0530    exported 108 records
```

# Query for Wins subset

```
db.data.aggregate([
   {$unwind  : "$player_data"},
   {$unwind  : "$Game_Feed"},

   {$match   : {"Game_Feed.Outcome": {"$regex":"End"}} },
   {$project : { "player_data.name":1,
                 "Role"   : { $substr: [ "$player_data.Role", 1, 4 ]}   ,
                 "Result" : { $substr: [ "$Game_Feed.Action", 0, 4 ]}   }},
   {$project : { "player_data.name":1,
                 "Win"          : {$cond: [{$eq:["$Result","$Role"]},1,0]},
                 "Crew_Win"     : {$cond: [{$and:[{$eq:["$Result","Crew"]},{$eq:["$Role","Crew"]}]},1,0]},
                 "Imposter_Win": {$cond: [{$and:[{$eq:["$Result","Impo"]},{$eq:["$Role","Impo"]}]},1,0]}   }},
   {$group   : {"_id":"$player_data.name",
                 "Played"          : {"$sum":1                  },
                 "Wins"            : {$sum: "$Win"         },
                 "Win As Crew"     : {$sum: "$Crew_Win"        },
                 "Win As Imposter": {$sum: "$Imposter_Win"  }     }},
   {$project : {"_id":1,
                 "Win_As_Crew":1,
                 "Win_As_Imposter":1,
                 "Win_Rate":{$multiply:[{$divide:["$Wins","$Played"]} ,100]}}},
   {$out     : "Win_data"}
])
```

# mongoexport for colors subset

```
mongoexport --db=assignment --collection=Win_data --type=csv
--fields=_id,Win_As_Crew,Win_As_Imposter,Win_Rate
--out=C:\Users\rrsha\Documents\PythonScripts\Assignment-folder\output\win_data.csv
```

Substitute this with the path where you want to store your data

```
D:\Software\Mongo\bin>mongoexport --db=assignment --collection=Win_data --type=csv --fields=_id,Win_As_Crew,Win_As_Imposter,Win_Rate --out=C:\Users\rrsha\Documents\PythonScripts\Assignment-folder\output\win_data.csv
2022-07-24T20:59:35.602+0530    connected to: mongodb://localhost/
2022-07-24T20:59:35.629+0530    exported 108 records
```

# Query for Votes subset

```
db.data.aggregate([
  {$unwind  : "$voting_data"},
  {$match   : {"voting_data.Is_alive": {"$regex":"Yes"}} },
  {$project : { "voting_data.name":1,
                "AgainstCrew" :
                   {$cond:[{ $regexMatch:{"input":"$voting_data.Vote","regex": "Crew"}},1,0]},
                "AgainstImpo" :
                   {$cond:[{ $regexMatch:{"input":"$voting_data.Vote","regex": "Impostor"}},1,0]}  }},
  {$group   : {"_id"                : "$voting_data.name",
               "Voted_Against_Crew": {$sum : "$AgainstCrew" },
               "Voted_Against_Impo": {$sum : "$AgainstImpo" },
               "Voting_Opprunites" : {"$sum":1} }},
  {$project : {"_id":1,
               "Voted_Against_Crew":1,
               "Voted_Against_Impo":1,
               "Voting_rate":
{$multiply:[{$divide:[{$add:["$Voted_Against_Crew","$Voted_Against_Impo"]},"$Voting_Opprunites"]} ,100]} }},
  {$out     : "voting_data"}
])
```

# mongoexport for colors subset

```
mongoexport --db=assignment --collection=voting_data --type=csv
--fields=_id,Voted_Against_Crew,Voted_Against_Impo,Voting_rate
--out=C:\Users\rrsha\Documents\PythonScripts\Assignment-folder\output\voting_data.csv
```

Substitute this with the path where you want to store your data

```
D:\Software\Mongo\bin>mongoexport --db=assignment --collection=voting_data --type=csv --fields=_id,Voted_Against_Crew,Voted_Against_Impo,Voting_rate --out=C:\Users\rrsha\Documents\PythonScripts\Assignment-folder\output\voting_data.csv
2022-07-24T20:10:56.398+0530    connected to: mongodb://localhost/
2022-07-24T20:10:56.411+0530    exported 107 records
```