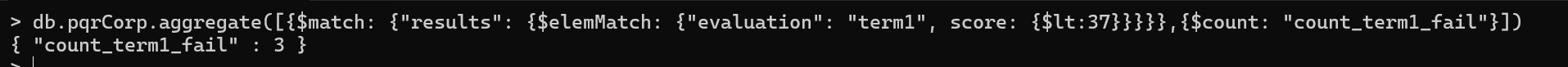
**MongoDB Developer and Administrator Project - Employee Training Score Analysis**

1. ***Find count and percentage of employees who failed in term 1, the passing score being 37***

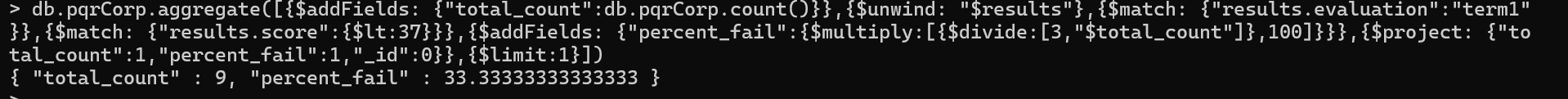
**Step1: Finding Count of employees who failed in term1**

**db.pqrCorp.aggregate([{$match: {"results": {$elemMatch: {"evaluation": "term1", score: {$lt:37}}}}},{$count: "count\_term1\_fail"}])**



**Step2: Finding Percentage of employees who failed in term1**

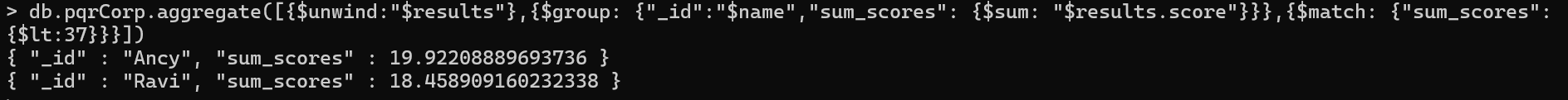
**db.pqrCorp.aggregate([{$addFields: {"total\_count":db.pqrCorp.count()}},{$unwind: "$results"},{$match: {"results.evaluation":"term1"}},{$match: {"results.score":{$lt:37}}},{$addFields: {"percent\_fail":{$multiply:[{$divide:[3,"$total\_count"]},100]}}},{$project: {"total\_count":1,"percent\_fail":1,"\_id":0}},{$limit:1}])**

****

1. ***Find employees who failed in aggregate (term1 + term2 + term3)***

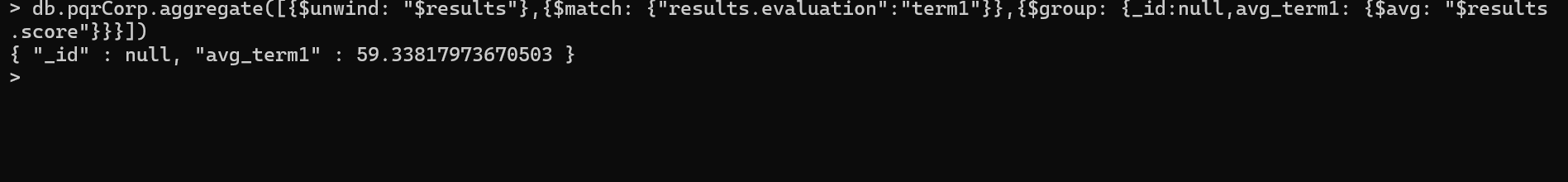
**Note: Considered aggregate as adding all term scores and total <37**

**db.pqrCorp.aggregate([{$unwind:"$results"},{$group: {"\_id":"$name","sum\_scores": {$sum: "$results.score"}}},{$match: {"sum\_scores":{$lt:37}}}])**

****

1. ***Find the Average score of trainees for term1***

**db.pqrCorp.aggregate([{$unwind: "$results"},{$match: {"results.evaluation":"term1"}},{$group: {\_id:null,avg\_term1: {$avg: "$results.score"}}}])**

****

1. ***Find the Average score of trainees for aggregate (term1 + term2 + term3)***

**Note: Considered aggregate as adding all the term scores for each trainee and finding the average**

**db.pqrCorp.aggregate([{$unwind:"$results"},{$group: {\_id:"$name",avg\_score: {$avg: "$results.score"}}}])**

**A screenshot of a computer

Description automatically generated**

1. ***Find number of employees who failed in all the three (term1 + term2 + term3)***

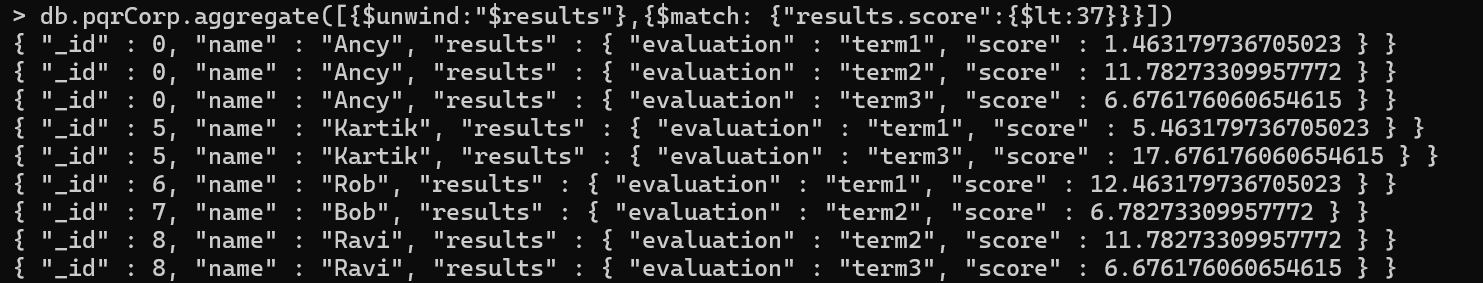
**db.pqrCorp.aggregate([{$match: {"results": {$elemMatch: {"evaluation": "term1", score:{$lt:37}}}}},{$match:{"results": {$elemMatch: {"evaluation": "term2", score:{$lt:37}}}}},{$match:{"results": {$elemMatch: {"evaluation": "term3", score: {$lt:37}}}}}])**

**A computer screen shot of white text

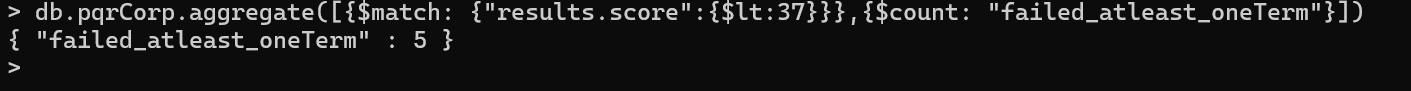
Description automatically generated**

1. ***Find the number of employees who failed in any of the three (term1 + term2 + term3)***

**db.pqrCorp.aggregate([{$unwind:"$results"},{$match: {"results.score":{$lt:37}}}])**

****

**db.pqrCorp.aggregate([{$match: {"results.score":{$lt:37}}},{$count: "failed\_atleast\_oneTerm"}])**

****