**Student Database (MongoDB)**

Queries need to answer:

1) Find the student name who scored maximum scores in all (exam, quiz and homework)?

db.Records.aggregate([{$project:{name:1,total:{$sum:[‘$scores.score’]}}}]).forEach(function(d){db.TotalScores.insert(d)})

db.TotalScores.find().sort({total:-1}).limit(1)

2) Find students who scored below average in the exam and pass mark is 40%?

db.Records.find({‘scores.0.score’:{’$lt’:40}})

3) Find students who scored below pass mark and assigned them as fail, and above pass mark as pass in all the categories.

Exam

db.Records.updateMany({‘scores.0.score’:{’$lt’:40}},{$set:{’scores.0.result’:’fail’}})

db.Records.updateMany({‘scores.0.score’:{’$gt’:40}},{$set:{’scores.0.result’:’pass’}})

Quiz

db.Records.updateMany({‘scores.1.score’:{’$lt’:40}},{$set:{’scores.1.result’:’fail’}})

db.Records.updateMany({‘scores.1.score’:{’$gt’:40}},{$set:{’scores.1.result’:’pass’}})

Homework

db.Records.updateMany({‘scores.2.score’:{’$lt’:40}},{$set:{’scores.2.result’:’fail’}})

db.Records.updateMany({‘scores.2.score’:{’$gt’:40}},{$set:{’scores.2.result’:’pass’}})

4) Find the total and average of the exam, quiz and homework and store them in a separate collection.

5) Create a new collection which consists of students who scored below average and above 40% in all the categories.

6) Create a new collection which consists of students who scored below the fail mark in all the categories.

db.Records.find({$and:[{‘scores.0.result’:’fail’},{‘scores.1.result’:’fail’},{‘scores.2.result’:’fail’}]}).forEach(function(d){db.FailResults.insert(d)})

7) Create a new collection which consists of students who scored above pass mark in all the categories.

db.Records.find({$and:[{‘scores.0.result’:’pass’},{‘scores.1.result’:’pass’},{‘scores.2.result’:’pass’}]}).forEach(function(d){db.PassResults.insert(d)})