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

StudentDb> db.StudentCollection.aggregate([{"$match":{"$and":[{scores:{$elemMatch:{"type":"exam", "score":{$gte:40}}}},{scores:{$elemMatch:{"type":"quiz", "score":{$gte:40}}}},{scores:{$elemMatch:{"type":"homework", "score":{$gte:40}}}}]}},{"$project":{"Name": "$name","scores":"$scores"}}])

[

{

\_id: 1,

Name: 'Aurelia Menendez',

scores: [

{ score: 60.06045071030959, type: 'exam' },

{ score: 52.79790691903873, type: 'quiz' },

{ score: 71.76133439165544, type: 'homework' }

]

},

{

\_id: 7,

Name: 'Salena Olmos',

scores: [

{ score: 90.37826509157176, type: 'exam' },

{ score: 42.48780666956811, type: 'quiz' },

{ score: 96.52986171633331, type: 'homework' }

]

},

{

\_id: 10,

Name: 'Denisha Cast',

scores: [

{ score: 45.61876862259409, type: 'exam' },

{ score: 98.35723209418343, type: 'quiz' },

{ score: 55.90835657173456, type: 'homework' }

]

},

{

\_id: 11,

Name: 'Marcus Blohm',

scores: [

{ score: 78.42617835651868, type: 'exam' },

{ score: 82.58372817930675, type: 'quiz' },

{ score: 87.49924733328717, type: 'homework' }

]

},

{

\_id: 12,

Name: 'Quincy Danaher',

scores: [

{ score: 54.29841278520669, type: 'exam' },

{ score: 85.61270164694737, type: 'quiz' },

{ score: 80.40732356118075, type: 'homework' }

]

},

{

\_id: 13,

Name: 'Jessika Dagenais',

scores: [

{ score: 90.47179954427436, type: 'exam' },

{ score: 90.3001402468489, type: 'quiz' },

{ score: 95.17753772405909, type: 'homework' }

]

},

{

\_id: 18,

Name: 'Verdell Sowinski',

scores: [

{ score: 62.12870233109035, type: 'exam' },

{ score: 84.74586220889356, type: 'quiz' },

{ score: 81.58947824932574, type: 'homework' }

]

},

{

\_id: 20,

Name: 'Tressa Schwing',

scores: [

{ score: 42.17439799514388, type: 'exam' },

{ score: 71.99314840599558, type: 'quiz' },

{ score: 81.23972632069464, type: 'homework' }

]

},

{

\_id: 23,

Name: 'Tamika Schildgen',

scores: [

{ score: 45.65432764125526, type: 'exam' },

{ score: 64.32927049658846, type: 'quiz' },

{ score: 83.53933351660562, type: 'homework' }

]

},

{

\_id: 32,

Name: 'Gwen Honig',

scores: [

{ score: 87.14345376886205, type: 'exam' },

{ score: 99.45824441135635, type: 'quiz' },

{ score: 76.66460454219344, type: 'homework' }

]

},

{

\_id: 36,

Name: 'Eugene Magdaleno',

scores: [

{ score: 73.055900093666, type: 'exam' },

{ score: 79.85621560462026, type: 'quiz' },

{ score: 66.09143669040472, type: 'homework' }

]

},

{

\_id: 52,

Name: 'Tawana Oberg',

scores: [

{ score: 80.59006098671075, type: 'exam' },

{ score: 93.28438118988183, type: 'quiz' },

{ score: 93.12134003887978, type: 'homework' }

]

},

{

\_id: 54,

Name: 'Joel Rueter',

scores: [

{ score: 87.53636893952853, type: 'exam' },

{ score: 92.70974674256513, type: 'quiz' },

{ score: 61.79032586247813, type: 'homework' }

]

},

{

\_id: 55,

Name: 'Tresa Sinha',

scores: [

{ score: 94.93136959210354, type: 'exam' },

{ score: 72.32226123565266, type: 'quiz' },

{ score: 77.248768811767, type: 'homework' }

]

},

{

\_id: 61,

Name: 'Grady Zemke',

scores: [

{ score: 51.91561300267121, type: 'exam' },

{ score: 50.08349374829509, type: 'quiz' },

{ score: 95.34139273570386, type: 'homework' }

]

},

{

\_id: 64,

Name: 'Whitley Fears',

scores: [

{ score: 89.61845831842888, type: 'exam' },

{ score: 82.44879156010508, type: 'quiz' },

{ score: 96.57912148645883, type: 'homework' }

]

},

{

\_id: 65,

Name: 'Gena Riccio',

scores: [

{ score: 67.58395308948619, type: 'exam' },

{ score: 67.2413500951588, type: 'quiz' },

{ score: 42.93471779899529, type: 'homework' }

]

},

{

\_id: 67,

Name: 'Merissa Mann',

scores: [

{ score: 75.1949733626123, type: 'exam' },

{ score: 52.56522605123723, type: 'quiz' },

{ score: 94.67518167209815, type: 'homework' }

]

},

{

\_id: 68,

Name: 'Jenise Mcguffie',

scores: [

{ score: 40.15210496060384, type: 'exam' },

{ score: 90.60219950183566, type: 'quiz' },

{ score: 51.58720341010564, type: 'homework' }

]

},

{

\_id: 75,

Name: 'Tonia Surace',

scores: [

{ score: 80.93655069496523, type: 'exam' },

{ score: 79.54620208144452, type: 'quiz' },

{ score: 41.34308724166419, type: 'homework' }

]

}

]

Type "it" for more