Part 2

lab1.json

[{

  "\_id": {

    "$oid": "63dac7e62ddce8df6a2f6ded"

  },

  "CustomerID": 30010,

  "LastName": "Mew",

  "FirstName": "Stephen",

  "EmailAddress": "stephen4@adventure-works.com",

  "Orders": [

    {

      "SalesOrderID": 44529,

      "TotalOrderQuantity": 1,

      "OrderValue": 472

    },

    {

      "SalesOrderID": 46063,

      "TotalOrderQuantity": 1,

      "OrderValue": 985

    }

  ]

},{

  "\_id": {

    "$oid": "63dac7e62ddce8df6a2f6dee"

  },

  "CustomerID": 30020,

  "LastName": "Miller",

  "FirstName": "Emilo",

  "EmailAddress": "emilo0@adventure-works.com",

  "Orders": [

    {

      "SalesOrderID": 53525,

      "TotalOrderQuantity": 80,

      "OrderValue": 592223

    },

    {

      "SalesOrderID": 58968,

      "TotalOrderQuantity": 16,

      "OrderValue": 141240

    },

    {

      "SalesOrderID": 65286,

      "TotalOrderQuantity": 21,

      "OrderValue": 134777

    },

    {

      "SalesOrderID": 71838,

      "TotalOrderQuantity": 17,

      "OrderValue": 103238

    }

  ]

},{

  "\_id": {

    "$oid": "63dac7e62ddce8df6a2f6def"

  },

  "CustomerID": 30083,

  "LastName": "Track",

  "FirstName": "Glenn",

  "EmailAddress": "glenn0@adventure-works.com",

  "Orders": [

    {

      "SalesOrderID": 47398,

      "TotalOrderQuantity": 152,

      "OrderValue": 3597824

    },

    {

      "SalesOrderID": 48339,

      "TotalOrderQuantity": 124,

      "OrderValue": 2574849

    },

    {

      "SalesOrderID": 49496,

      "TotalOrderQuantity": 72,

      "OrderValue": 1428758

    },

    {

      "SalesOrderID": 50689,

      "TotalOrderQuantity": 120,

      "OrderValue": 2343950

    }

  ]

}]

Average:

[

  {

    "\_id": null,

    "avgOrderValue": 1091831.6,

    "avgOrderQuantity": 60.4

  }

]

Code:

use("DAMG6210\_Lab1Part2");

db.lab1.drop();

db.lab1.insertMany([

 {'CustomerID': 30010, 'LastName': 'Mew', 'FirstName': 'Stephen', 'EmailAddress': 'stephen4@adventure-works.com',

  'Orders':[

    {'SalesOrderID': 44529, 'TotalOrderQuantity': 1, 'OrderValue': 472},

    {'SalesOrderID': 46063, 'TotalOrderQuantity': 1, 'OrderValue': 985},

  ]

 },

 {'CustomerID': 30020, 'LastName': 'Miller', 'FirstName': 'Emilo', 'EmailAddress': 'emilo0@adventure-works.com',

  'Orders':[

    {'SalesOrderID': 53525, 'TotalOrderQuantity': 80, 'OrderValue': 592223},

    {'SalesOrderID': 58968, 'TotalOrderQuantity': 16, 'OrderValue': 141240},

    {'SalesOrderID': 65286, 'TotalOrderQuantity': 21, 'OrderValue': 134777},

    {'SalesOrderID': 71838, 'TotalOrderQuantity': 17, 'OrderValue': 103238}

  ]

 },

 {'CustomerID': 30083, 'LastName': 'Track', 'FirstName': 'Glenn', 'EmailAddress': 'glenn0@adventure-works.com',

  'Orders':[

    {'SalesOrderID': 47398, 'TotalOrderQuantity': 152, 'OrderValue': 3597824},

    {'SalesOrderID': 48339, 'TotalOrderQuantity': 124, 'OrderValue': 2574849},

    {'SalesOrderID': 49496, 'TotalOrderQuantity': 72, 'OrderValue': 1428758},

    {'SalesOrderID': 50689, 'TotalOrderQuantity': 120, 'OrderValue': 2343950}

  ]

 },

]);

//db.lab1.find({});

//

db.lab1.aggregate([

    {$unwind: "$Orders"},

    {$group:

        {

            \_id: null,

            avgOrderValue: {$avg: "$Orders.OrderValue"},

            avgOrderQuantity: {$avg: "$Orders.TotalOrderQuantity"}

        }

    }

]);

//