Homework - 3

Question 1

Input Data:
db.orders.insertMany([

   { _id: 0, productName: "Steel beam", status: "new", quantity: 10 },

   { _id: 1, productName: "Steel beam", status: "urgent", quantity: 20 },

   { _id: 2, productName: "Steel beam", status: "urgent", quantity: 30 },

   { _id: 3, productName: "Iron rod", status: "new", quantity: 15 },

   { _id: 4, productName: "Iron rod", status: "urgent", quantity: 50 },

   { _id: 5, productName: "Iron rod", status: "urgent", quantity: 10 }

])

(you may have to delete all the double quotes and redo it again)

Output needed:
a)
[
 { _id: 'Iron rod', sumQuantity: 75 },
 { _id: 'Steel beam', sumQuantity: 60 }
]

b)
[
 { _id: 'Iron rod', sumQuantity: 60 },
 { _id: 'Steel beam', sumQuantity: 50 }
]

c)
[
 { _id: ['Iron rod', 'new'], sumQuantity: 15 },

```
  { _id: [ 'Iron rod', 'urgent' ], sumQuantity: 60 },
  { _id: [ 'Steel beam', 'new' ], sumQuantity: 10 },
  { _id: [ 'Steel beam', 'urgent' ], sumQuantity: 50 }
]

d)
[
  { _id: [ 'Iron rod', 'urgent' ], sumQuantity: 60 },
  { _id: [ 'Iron rod', 'new' ], sumQuantity: 15 },
  { _id: [ 'Steel beam', 'urgent' ], sumQuantity: 50 }
]
```

Please do the aggregation function for each of the steps above. And for each of the answers identify how many stages are there in the pipeline.

Question 2

Load the sample data set -
https://docs.atlas.mongodb.com/sample-data/#std-label-load-sample-data

Go to dbs = training; collection = grades

a) How many different classes are there
b) How many different students are there
c) For class_id 212, what is avg of the exam score
d) For class_id 212, what is std dev of the exam score

Bonus/Optional Question

You do this question only if you want challenges. There are no points for this - except for the satisfaction of knocking off an interesting one.

Load the sample data set -
https://docs.atlas.mongodb.com/sample-data/#std-label-load-sample-data

Go to dbs = training; collection = route.
You should have enough domain knowledge to know what the collection is about.
Find out what is the most frequently flown route.