

**Faculty of Information and Communication Technology, Mahidol University**  
**ITCS495 Special Topics in Database and Intelligent Systems**

## **Practical Lab 2**

**Please perform the following tasks and write the command together with a screenshot of the result in the answer sections**

1. Populate the data from [here](#) into the database as JSON.
2. Populate one item **item: "postcard", qty: 30, status: "A", size: { h: 10, w: 15.25, uom: "cm" }, tags: [ "blue", "red" ]**.
3. Search for the items that have status equals to **A**.
4. Search for the items that have h equals to **10**.
5. Search for the items that have status equals to either **A** or **D**.
6. Search for the items that have status equals to **A** and qty is less than **20**.
7. Search for the items that have status equals to either **A** or **D** and qty is less than **30**.
8. Search for the items that have name starts with the character **p**.
9. Search for the items that have tag contains **red**.
10. Search for the name of all items.
11. Search for the name and status of the items that have w greater than 10.
12. Search for the name and size of the items that have tag contains **blank**.
13. Search for the name, status, and qty of the items that have status equals to **A** and qty is less than **20** or the name starts with s.

### **Submission**

1. Please enter your name and id
2. Answer all questions in the answer section
3. Save as pdf and submit it on Mycourses

**Answer section (You can add more number here.)****1.**

```

6 db.item.insertMany([
7   {
8     item: 'pencil',
9     qty: 20,
10    status: 'A',
11    size: {
12      h: 10,
13      w: 0.5,
14      uom: 'cm'
15    },
16    tag: ['black', 'red']
17  },
18  {
19    item: 'ruler',
20    qty: 10,
21    status: 'D',
22    size: {
23      h: 12,
24      w: 1,
25      uom: 'in'
26    },
27    tag: ['red', 'blue', 'plain']
28  },
29  {
30    item: 'pen',
31    qty: 15,
32    status: 'A',
33    size: {
34      h: 10,
35      w: 0.5,
36      uom: 'cm'
37    },
38    tag: ['black', 'red', 'blue']
39  },
40  {
41    item: 'stickynote',
42    qty: 23,
43    status: 'D',
44    size: {
45      h: 5,
46      w: 5,
47      uom: 'cm'
48    },
49    tag: ['black', 'red', 'blue', 'pink']
50  },
51 ])

```

**2.**

```

54 db.item.insertOne({
55   item: "postcard",
56   qty: 30,
57   status: "A",
58   size: {
59     h: 10,
60     w: 15.25,
61     uom: "cm"
62   },
63 },
64 tags: ["blue", "red"]
65 })

```

**3.**

```

68 db.item.find({status: 'A'})

```

**4.**

```

71 db.item.find({'size.h': {$eq: 10}})

```

**5.**

```

74 db.item.find({$or: [{status: 'A'}, {status: 'D'}]})

```

6.

```
77 db.item.find({status: 'A', qty: {$lt: 20}})
```

7.

```
80 db.item.find({$or: [{status: 'A'}, {status: 'D'}], qty: {$lt: 30}})
```

8.

```
83 db.item.find({item: {$regex: /^p.*$/}})
```

9.

```
86 db.item.find({tag: 'red'})
```

10.

```
89 db.item.find({}, {item: 1})
```

11.

```
92 db.item.find({"size.w": {$gt: 10}}, {item: 1, status: 1})
```

12.

```
95 db.item.find({tag: null}, {item:1, size:1})
```

13.

```
98 db.item.find({status: 'A', $or: [{qty: {$lt: 20}}, {item: {$regex: /^s.*$/}}]}, {item:1, status:1, qty:1})
```