

B10523030 簡聿均
資料庫管理 (二) Final Exam

Topic:



潘得龍

to me ▾

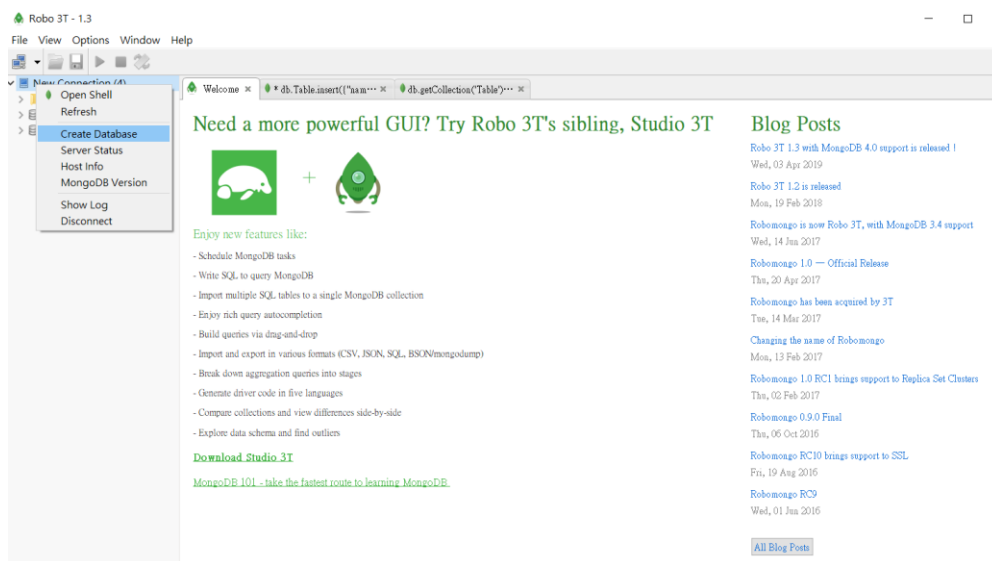
Ok Jerry,

Can you write a document about how to set up a MongoDB and design a schema as your final exam?
Pan

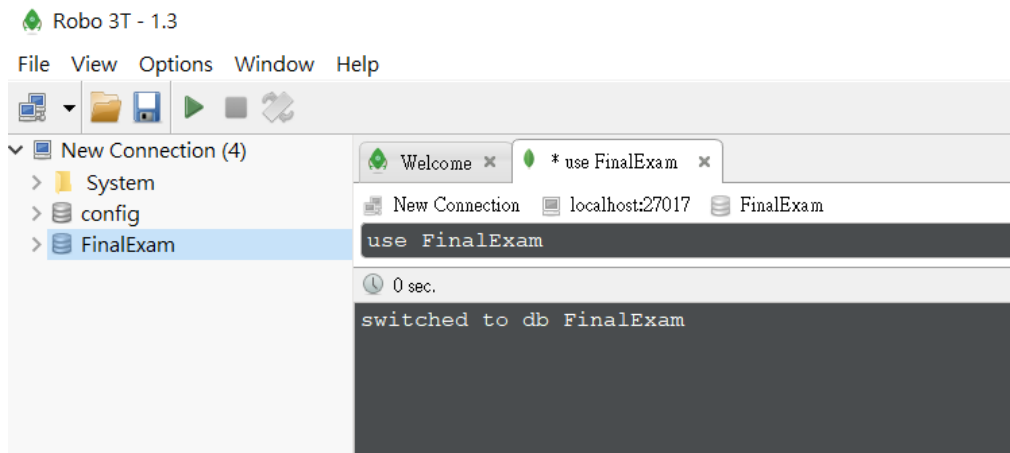
Answer:

(1) Set up a MongoDB

我使用了 Robo 3T 作為 MongoDB 的開發介面，一開始我們需要先建立一個 Database 出來，我在這邊命名為"Final Exam"

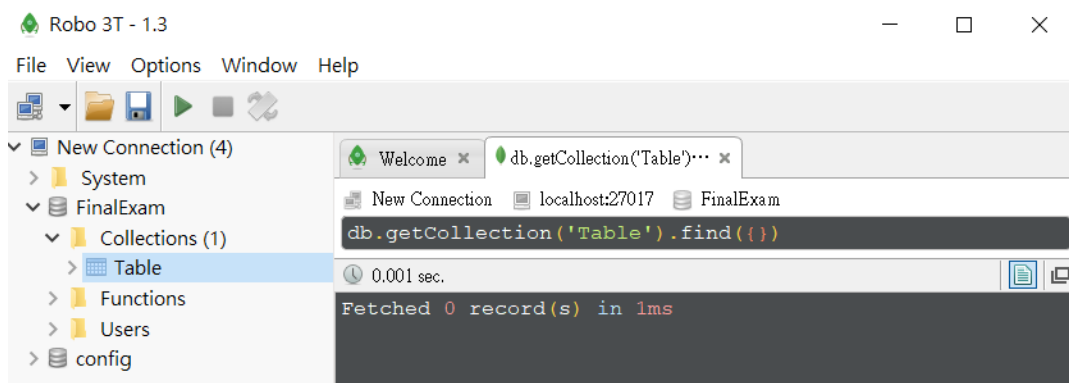


(2) 開啟 Shell 介面開始 Schema 的操作，利用 "use" 來切換使用的 DB 資料庫
"use FinalExam"



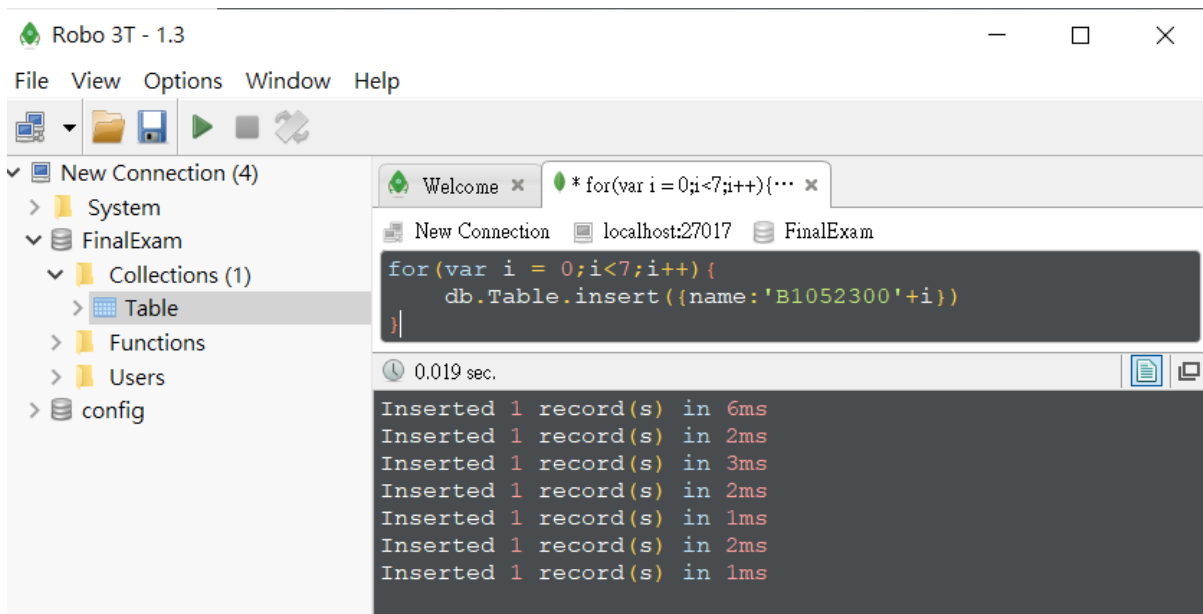
(3) 進行資料表 Table 的建置 `db.getCollection('Table').find({})`

```
db.Table.insert({"name":"Jerry"}, {"num":"B10523030"}, {"Major":"information"})
```

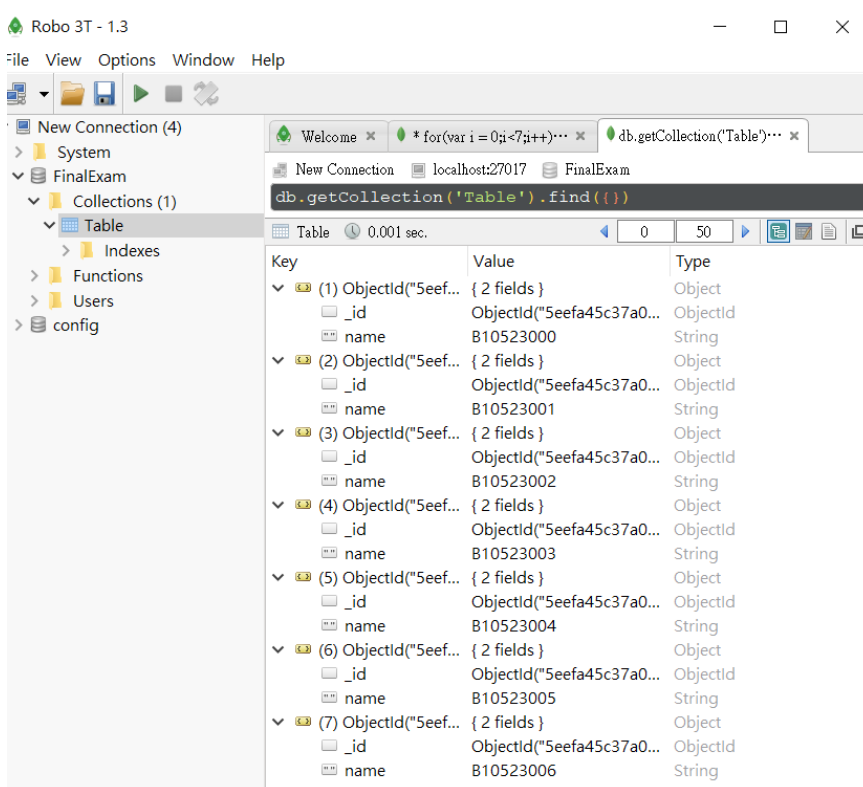


(4) 在 Table 資料表中迴圈產出學號 B10523000 ~ B10523007 的資料

```
for(var i = 0;i<7;i++){
    db.Table.insert({name:'B1052300'+i})
}
```



確定資料產出無誤



(5) 利用 SCHEMA 撰寫出一個資料庫，本資料庫命名為"Student" 並且命令其屬性有 name , id , class, teacher

```
for(var i = 1; i < 10; i++){
  db.student.insert({
```

```

        name:'Pan' + i,
        id:'B1052300'+i,
        class:'A',
        teacher:'DL_Pan'}
    )
}

```

(6)完成資料設計後，我們採用 FIND 搜尋所有 teacher 為 DL_Pan 的老師
`db.student.find({"teacher":{"$type:2}})`

Robo 3T - 1.3

File View Options Window Help

New Connection (4)

- System
- FinalExam
 - Collections (2)
 - Student
 - Indexes
 - Table
 - Functions
 - Users
 - config

Welcome x *for(var i = 1;i<10;i++) x *db.getCollection("Table... x

New Connection localhost:27017 FinalExam

```

for(var i = 1;i<10;i++){
  db.student.insert({
    name:'Pan' + i,
    id:'B1052300'+i,
    class:'A',
    teacher:'DL_Pan'}
  )
}
db.student.find({"teacher":{"$type:2}})

```

0.041 sec.

```

Inserted 1 record(s) in 25ms
Inserted 1 record(s) in 2ms
Inserted 1 record(s) in 2ms
Inserted 1 record(s) in 3ms
Inserted 1 record(s) in 2ms
Inserted 1 record(s) in 1ms
Inserted 1 record(s) in 2ms
Inserted 1 record(s) in 1ms
Inserted 1 record(s) in 2ms

```

student 0.002 sec. 0 50

_id	name	id	class	teacher
1	Pan1	B10523001	A	DL_Pan
2	Pan2	B10523002	A	DL_Pan
3	Pan3	B10523003	A	DL_Pan
4	Pan4	B10523004	A	DL_Pan
5	Pan5	B10523005	A	DL_Pan
6	Pan6	B10523006	A	DL_Pan
7	Pan7	B10523007	A	DL_Pan
8	Pan8	B10523008	A	DL_Pan
9	Pan9	B10523009	A	DL_Pan

Logs