

(base) C:\Users\ASG>cd Desktop

(base) C:\Users\ASG\Desktop>python ds8\_mongodb.py

Requirement already satisfied: pymongo in c:\programdata\anaconda\_3\lib\site-packages (3.9.0)

'sudo' is not recognized as an internal or external command,

operable program or batch file.

db = client.test

Database(MongoClient(host=['cluster0-shard-00-02-wymel.mongodb.net:27017', 'cluster0-shard-00-00-wymel.mongodb.net:27017', 'cluster0-shard-00-01-wymel.mongodb.net:27017'], document\_class=dict, tz\_aware=False, connect=True, ssl=True, replicaset='Cluster0-shard-0', authsource='admin', retrywrites=True, w='majority'), 'test')

The machines incorporated into the cluster

frozenset()

The directory of db.test

['\_BaseObject\_\_codec\_options', '\_BaseObject\_\_read\_concern', '\_BaseObject\_\_read\_preference', '\_BaseObject\_\_write\_concern', '\_Collection\_\_create', '\_Collection\_\_create\_index', '\_Collection\_\_database', '\_Collection\_\_find\_and\_modify', '\_Collection\_\_full\_name', '\_Collection\_\_name', '\_Collection\_\_write\_response\_codec\_options', '\_\_call\_\_', '\_\_class\_\_', '\_\_delattr\_\_', '\_\_dict\_\_', '\_\_dir\_\_', '\_\_doc\_\_', '\_\_eq\_\_', '\_\_format\_\_', '\_\_ge\_\_', '\_\_getattr\_\_', '\_\_getattribute\_\_', '\_\_getitem\_\_', '\_\_gt\_\_', '\_\_hash\_\_', '\_\_init\_\_', '\_\_init\_subclass\_\_', '\_\_iter\_\_', '\_\_le\_\_', '\_\_lt\_\_', '\_\_module\_\_', '\_\_ne\_\_', '\_\_new\_\_', '\_\_next\_\_', '\_\_reduce\_\_', '\_\_reduce\_ex\_\_', '\_\_repr\_\_', '\_\_setattr\_\_', '\_\_sizeof\_\_', '\_\_str\_\_', '\_\_subclasshook\_\_', '\_\_weakref\_\_', '\_aggregate', '\_aggregate\_one\_result', '\_command', '\_count', '\_delete', '\_delete\_retryable', '\_insert', '\_insert\_one', '\_legacy\_write', '\_map\_reduce', '\_read\_preference\_for', '\_socket\_for\_reads', '\_socket\_for\_writes', '\_update', '\_update\_retryable', '\_write\_concern\_for', '\_write\_concern\_for\_cmd', 'aggregate', 'aggregate\_raw\_batches', 'bulk\_write', 'codec\_options', 'count', 'count\_documents', 'create\_index', 'create\_indexes', 'database', 'delete\_many', 'delete\_one', 'distinct', 'drop', 'drop\_index', 'drop\_indexes', 'ensure\_index', 'estimated\_document\_count', 'find', 'find\_and\_modify', 'find\_one', 'find\_one\_and\_delete', 'find\_one\_and\_replace', 'find\_one\_and\_update', 'find\_raw\_batches', 'full\_name', 'group', 'index\_information', 'initialize\_ordered\_bulk\_op', 'initialize\_unordered\_bulk\_op', 'inline\_map\_reduce', 'insert', 'insert\_many', 'insert\_one', 'list\_indexes', 'map\_reduce', 'name', 'next',

'options', 'parallel\_scan', 'read\_concern', 'read\_preference', 'reindex', 'remove', 'rename', 'replace\_one', 'save', 'update', 'update\_many', 'update\_one', 'watch', 'with\_options', 'write\_concern']

The number of documents after a document has been inserted

3

The result of the find\_one command

```
{'_id': ObjectId('5d9e3f711c4000d7596691f3'), 'x': 1}
```

The result of the find command

```
<pymongo.cursor.Cursor object at 0x000001CC19174EF0>
```

The directory of the cursor

```
[{'_id': ObjectId('5d9e3f711c4000d7596691f3'), 'x': 1},  
{'_id': ObjectId('5d9e3fb81c4000d7596691f4'), 'x': 1},  
{'_id': ObjectId('5dc36718d7fe330b2ca00f6c'), 'x': 1}]
```

The list of newly added items

```
[{'_id': ObjectId('5d9e3f711c4000d7596691f3'), 'x': 1},  
{'_id': ObjectId('5d9e3fb81c4000d7596691f4'), 'x': 1},  
{'_id': ObjectId('5d9e48a71c4000d7596691f5'), 'favorite_animal': 'Dog'},  
{'_id': ObjectId('5d9e48a71c4000d7596691f6'),  
 'favorite_animal': 'Cat',  
 'favorite_color': ' Blue'},  
{'_id': ObjectId('5d9e48a71c4000d7596691f7'), 'favorite_animal': 'Ape'},
```

```
{'_id': ObjectId('5d9e49941c4000d7596691f8'), 'even': True, 'value': 10},
{'_id': ObjectId('5d9e49941c4000d7596691fa'), 'even': True, 'value': 12},
{'_id': ObjectId('5d9e49941c4000d7596691fc'), 'even': True, 'value': 19},
{'_id': ObjectId('5d9e49941c4000d7596691fe'), 'even': True, 'value': 16},
{'_id': ObjectId('5d9e49941c4000d759669200'), 'even': True, 'value': 18},
{'_id': ObjectId('5d9e4b6d1c4000d759669202'),
'rpg_character': [1, 'King Bob', 10, 3, 0, 0, 0]},
{'_id': ObjectId('5d9e4fe01c4000d759669203'),
'hp': 10,
'level': 3,
'name': 'King Bob',
'sql_id': 1},
{'_id': ObjectId('5dc36718d7fe330b2ca00f6c'), 'x': 1},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f6d'),
'favorite animal': ['Kokopo', 'Dog']},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f6e'),
'favorite animal': 'Snakes',
'favorite color': 'Cyan'},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f6f'), 'favorite animal': 'Red Panda'}}
```

Viewing additional documents that were made

```
[{'even': True, 'value': 0},
{'even': False, 'value': 1},
{'even': True, 'value': 2},
{'even': False, 'value': 3},
{'even': True, 'value': 4},
{'even': False, 'value': 5},
{'even': True, 'value': 6},
```

```
{'even': False, 'value': 7},  
{'even': True, 'value': 8},  
{'even': False, 'value': 9}]
```

Finding items that are labeled even

```
[{'_id': ObjectId('5dc3671ad7fe330b2ca00f71'), 'even': False, 'value': 1},  
{'_id': ObjectId('5dc3671ad7fe330b2ca00f73'), 'even': False, 'value': 3},  
{'_id': ObjectId('5dc3671ad7fe330b2ca00f75'), 'even': False, 'value': 5},  
{'_id': ObjectId('5dc3671ad7fe330b2ca00f77'), 'even': False, 'value': 7},  
{'_id': ObjectId('5dc3671ad7fe330b2ca00f79'), 'even': False, 'value': 9}]
```

Finding items where the favorite animal is Red Panda

```
[{'_id': ObjectId('5dc3671ad7fe330b2ca00f6f'), 'favorite animal': 'Red Panda'}]
```

View the database to see change that was made

```
[{'_id': ObjectId('5d9e3f711c4000d7596691f3'), 'x': 1},  
{'_id': ObjectId('5d9e3fb81c4000d7596691f4'), 'x': 1},  
{'_id': ObjectId('5d9e48a71c4000d7596691f5'), 'favorite_animal': 'Dog'},  
{'_id': ObjectId('5d9e48a71c4000d7596691f6'),  
 'favorite_animal': 'Cat',  
 'favorite_color': ' Blue'},  
{'_id': ObjectId('5d9e48a71c4000d7596691f7'), 'favorite_animal': 'Ape'},  
{'_id': ObjectId('5d9e49941c4000d7596691f8'), 'even': True, 'value': 10},  
{'_id': ObjectId('5d9e49941c4000d7596691fa'), 'even': True, 'value': 12},  
{'_id': ObjectId('5d9e49941c4000d7596691fc'), 'even': True, 'value': 19},  
{'_id': ObjectId('5d9e49941c4000d7596691fe'), 'even': True, 'value': 16},
```

```
{'_id': ObjectId('5d9e49941c4000d759669200'), 'even': True, 'value': 18},
{'_id': ObjectId('5d9e4b6d1c4000d759669202'),
 'rpg_character': [1, 'King Bob', 10, 3, 0, 0, 0]},
{'_id': ObjectId('5d9e4fe01c4000d759669203'),
 'hp': 10,
 'level': 3,
 'name': 'King Bob',
 'sql_id': 1},
{'_id': ObjectId('5dc36718d7fe330b2ca00f6c'), 'x': 1},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f6d'),
 'favorite animal': ['Kokopo', 'Dog']},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f6e'),
 'favorite animal': 'Snakes',
 'favorite color': 'Cyan'},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f6f'), 'favorite animal': 'Red Panda'},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f70'), 'even': True, 'value': 0},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f71'), 'even': False, 'value': 1},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f72'), 'even': True, 'value': 2},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f73'), 'even': False, 'value': 8},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f74'), 'even': True, 'value': 4},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f75'), 'even': False, 'value': 5},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f76'), 'even': True, 'value': 6},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f77'), 'even': False, 'value': 7},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f78'), 'even': True, 'value': 8},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f79'), 'even': False, 'value': 9}}
```

View change made to multiple items

```
[{'_id': ObjectId('5d9e49941c4000d7596691f8'), 'even': True, 'value': 110},
```

```
{'_id': ObjectId('5d9e49941c4000d7596691fa'), 'even': True, 'value': 112},
{'_id': ObjectId('5d9e49941c4000d7596691fc'), 'even': True, 'value': 119},
{'_id': ObjectId('5d9e49941c4000d7596691fe'), 'even': True, 'value': 116},
{'_id': ObjectId('5d9e49941c4000d759669200'), 'even': True, 'value': 118},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f70'), 'even': True, 'value': 100},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f72'), 'even': True, 'value': 102},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f74'), 'even': True, 'value': 104},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f76'), 'even': True, 'value': 106},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f78'), 'even': True, 'value': 108}]
```

View list after removing odd items

```
[{'_id': ObjectId('5d9e3f711c4000d7596691f3'), 'x': 1},
{'_id': ObjectId('5d9e3fb81c4000d7596691f4'), 'x': 1},
{'_id': ObjectId('5d9e48a71c4000d7596691f5'), 'favorite_animal': 'Dog'},
{'_id': ObjectId('5d9e48a71c4000d7596691f6'),
'favorite_animal': 'Cat',
'favorite_color': ' Blue'},
{'_id': ObjectId('5d9e48a71c4000d7596691f7'), 'favorite_animal': 'Ape'},
{'_id': ObjectId('5d9e49941c4000d7596691f8'), 'even': True, 'value': 110},
{'_id': ObjectId('5d9e49941c4000d7596691fa'), 'even': True, 'value': 112},
{'_id': ObjectId('5d9e49941c4000d7596691fc'), 'even': True, 'value': 119},
{'_id': ObjectId('5d9e49941c4000d7596691fe'), 'even': True, 'value': 116},
{'_id': ObjectId('5d9e49941c4000d759669200'), 'even': True, 'value': 118},
{'_id': ObjectId('5d9e4b6d1c4000d759669202'),
'rpg_character': [1, 'King Bob', 10, 3, 0, 0, 0]},
{'_id': ObjectId('5d9e4fe01c4000d759669203'),
'hp': 10,
'level': 3,
```

```
'name': 'King Bob',
'sql_id': 1},
{'_id': ObjectId('5dc36718d7fe330b2ca00f6c'), 'x': 1},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f6d'),
'favorite animal': ['Kokopo', 'Dog']},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f6e'),
'favorite animal': 'Snakes',
'favorite color': 'Cyan'},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f6f'), 'favorite animal': 'Red Panda'},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f70'), 'even': True, 'value': 100},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f72'), 'even': True, 'value': 102},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f74'), 'even': True, 'value': 104},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f76'), 'even': True, 'value': 106},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f78'), 'even': True, 'value': 108}]
```

View database after adding an rpg\_character

```
[{'_id': ObjectId('5d9e3f711c4000d7596691f3'), 'x': 1},
{'_id': ObjectId('5d9e3fb81c4000d7596691f4'), 'x': 1},
{'_id': ObjectId('5d9e48a71c4000d7596691f5'), 'favorite_animal': 'Dog'},
{'_id': ObjectId('5d9e48a71c4000d7596691f6'),
'favorite_animal': 'Cat',
'favorite_color': ' Blue'},
{'_id': ObjectId('5d9e48a71c4000d7596691f7'), 'favorite_animal': 'Ape'},
{'_id': ObjectId('5d9e49941c4000d7596691f8'), 'even': True, 'value': 110},
{'_id': ObjectId('5d9e49941c4000d7596691fa'), 'even': True, 'value': 112},
{'_id': ObjectId('5d9e49941c4000d7596691fc'), 'even': True, 'value': 119},
{'_id': ObjectId('5d9e49941c4000d7596691fe'), 'even': True, 'value': 116},
{'_id': ObjectId('5d9e49941c4000d759669200'), 'even': True, 'value': 118},
```

```
{'_id': ObjectId('5d9e4b6d1c4000d759669202'),
'rpg_character': [1, 'King Bob', 10, 3, 0, 0, 0]},
{'_id': ObjectId('5d9e4fe01c4000d759669203'),
'hp': 10,
'level': 3,
'name': 'King Bob',
'sql_id': 1},
{'_id': ObjectId('5dc36718d7fe330b2ca00f6c'), 'x': 1},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f6d'),
'favorite animal': ['Kokopo', 'Dog']},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f6e'),
'favorite animal': 'Snakes',
'favorite color': 'Cyan'},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f6f'), 'favorite animal': 'Red Panda'},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f70'), 'even': True, 'value': 100},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f72'), 'even': True, 'value': 102},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f74'), 'even': True, 'value': 104},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f76'), 'even': True, 'value': 106},
{'_id': ObjectId('5dc3671ad7fe330b2ca00f78'), 'even': True, 'value': 108},
{'_id': ObjectId('5dc3671bd7fe330b2ca00f7a'),
'rpg_character': [1, 'King Bob', 10, 3, 0, 0, 0]}
```