

README

Program1 should be first and the program 2, because program 1 start first it will delete the whole thing in the mongodb. Just make sure the result will be the same.

Some information about mongodb and python I used:

Mongodb:

VERSION: 5.0.13

REGION: AWS N. Virginia (us-east-1)

CLUSTER TIER: M0 Sandbox (General)

Python 3.9.6

Program 1

The `restaurant.csv`

```
Top Tier Restaurant,Houston,TX
McD,Dallas,TX
Eating Good,Dallas,GA
```

The `match.csv`

```
McD,Supplier 1,Chicken,USA
Eating Good,Great Foods,Orange,Mexico
McD,Supplier 1,Egg,Canada
Eating Good,This supplier,Orange,Mexico
```

The `supplier.csv`

```
Supplier 1,Houston,TX,3,Chicken,USA,Egg,Canada,Chicken,China
This supplier,Dallas,TX,2,Orange,Mexico,Avocado,Mexico
Great Foods,Seattle,WA,6,Orange,Mexico,Orange,USA,Banana,Panama,Banana,Italy,Frog
legs,Hong Kong,Frog legs,France
```

In the program 1

`result_Bingying_Liang.txt`

```
[
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b18478"
    },
    "restaurant_name": "Top Tier Restaurant",
    "city": "Houston",
    "state": "TX"
  },
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b18479"
    },
    "restaurant_name": "McD",
    "city": "Dallas",
    "state": "TX"
  },
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b1847a"
    },
    "restaurant_name": "Eating Good",
    "city": "Dallas",
    "state": "GA"
  }
]
```

```
-----
[
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b1847b"
    },
    "restaurant_name": "McD",
    "supplier_name": "Supplier 1",
    "food": "Chicken",
    "country": "USA"
  },
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b1847c"
    },
    "restaurant_name": "Eating Good",
    "supplier_name": "Great Foods",
    "food": "Orange",
    "country": "Mexico"
  }
]
```

```

    },
    {
      "_id": {
        "$oid": "63530b26c8d4b3cf42b1847d"
      },
      "restaurant_name": "McD",
      "supplier_name": "Supplier 1",
      "food": "Egg",
      "country": "Canada"
    },
    {
      "_id": {
        "$oid": "63530b26c8d4b3cf42b1847e"
      },
      "restaurant_name": "Eating Good",
      "supplier_name": "This supplier",
      "food": "Orange",
      "country": "Mexico"
    }
  ]
}

```

```

-----
[
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b1847f"
    },
    "supplier_name": "Supplier 1",
    "supplier_city": "Houston",
    "supplier_state": "TX",
    "supplier_number": "3",
    "supplier_food": [
      {
        "food": "Chicken",
        "country": "USA"
      },
      {
        "food": "Egg",
        "country": "Canada"
      },
      {
        "food": "Chicken",
        "country": "China"
      }
    ]
  },
  {

```

```
"_id": {
  "$oid": "63530b26c8d4b3cf42b18480"
},
"supplier_name": "This supplier",
"supplier_city": "Dallas",
"supplier_state": "TX",
"supplier_number": "2",
"supplier_food": [
  {
    "food": "Orange",
    "country": "Mexico"
  },
  {
    "food": "Avocado",
    "country": "Mexico"
  }
]
},
{
  "_id": {
    "$oid": "63530b26c8d4b3cf42b18481"
  },
  "supplier_name": "Great Foods",
  "supplier_city": "Seattle",
  "supplier_state": "WA",
  "supplier_number": "6",
  "supplier_food": [
    {
      "food": "Orange",
      "country": "Mexico"
    },
    {
      "food": "Orange",
      "country": "USA"
    },
    {
      "food": "Banana",
      "country": "Panama"
    },
    {
      "food": "Banana",
      "country": "Italy"
    },
    {
      "food": "Frog legs",
      "country": "Hong Kong"
    }
  ]
}
```

```
    },  
    {  
        "food": "Frog legs",  
        "country": "France"  
    }  
]  
}
```

Program 2

The `command.csv`, I use the following examples.

```
0,McD,Supplier 2,Apple,USA  
0,McD,Supplier 1,Chicken,USA  
1,McD,Supplier 2,Apple,USA  
1,McD,Supplier 2,Apple,USA  
2,Top Tier Restaurant  
2,Ha tea  
2,McD  
2,Eating Good  
3,Chicken  
3,Tea
```

And the result should be like the following

```
0,McD,Supplier 2,Apple,USA
```

Successful insertion

```
0,McD,Supplier 1,Chicken,USA
```

Info already exists

```
1,McD,Supplier 2,Apple,USA
```

Successful Deletion

1,McD,Supplier 2,Apple,USA

Info does not exists

2,Top Tier Restaurant

Top Tier Restaurant
Houston TX
Not found

2,Ha tea

Not found

2,McD

McD
Dallas TX
Chicken Supplier 1
Egg Supplier 1

2,Eating Good

Eating Good
Dallas GA
Orange This supplier Great Foods

3,Chicken

McD Dallas TX

3,Tea

Not found

At the last, the output all the documents.

In the program2

result2_Bingying_Liang.txt

```
Successful insertion
-----
Info already exists
-----
Successful Deletion
-----
Info does not exists
-----
Top Tier Restaurant
Houston TX
Not found
-----
Not found
-----
McD
Dallas TX
Chicken Supplier 1
Egg Supplier 1
-----
Eating Good
Dallas GA
Orange This supplier Great Foods
-----
McD Dallas TX
-----
Not found
-----
[
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b18478"
    },
    "restaurant_name": "Top Tier Restaurant",
    "city": "Houston",
    "state": "TX"
  },
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b18479"
    },
    "restaurant_name": "Eating Good",
    "city": "Dallas",
    "state": "GA"
  },
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b1847a"
    },
    "restaurant_name": "Orange This supplier Great Foods",
    "city": "Dallas",
    "state": "TX"
  },
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b1847b"
    },
    "restaurant_name": "McD Dallas TX",
    "city": "Dallas",
    "state": "TX"
  }
]
```

```
},
{
  "_id": {
    "$oid": "63530b26c8d4b3cf42b18479"
  },
  "restaurant_name": "McD",
  "city": "Dallas",
  "state": "TX"
},
{
  "_id": {
    "$oid": "63530b26c8d4b3cf42b1847a"
  },
  "restaurant_name": "Eating Good",
  "city": "Dallas",
  "state": "GA"
}
]
```

```
-----
[
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b1847b"
    },
    "restaurant_name": "McD",
    "supplier_name": "Supplier 1",
    "food": "Chicken",
    "country": "USA"
  },
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b1847c"
    },
    "restaurant_name": "Eating Good",
    "supplier_name": "Great Foods",
    "food": "Orange",
    "country": "Mexico"
  },
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b1847d"
    },
    "restaurant_name": "McD",
    "supplier_name": "Supplier 1",
    "food": "Egg",
    "country": "Canada"
  },
  ,

```



```
},
{
  "_id": {
    "$oid": "63530b26c8d4b3cf42b1847e"
  },
  "restaurant_name": "Eating Good",
  "supplier_name": "This supplier",
  "food": "Orange",
  "country": "Mexico"
}
]
```

```
-----
[
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b1847f"
    },
    "supplier_name": "Supplier 1",
    "supplier_city": "Houston",
    "supplier_state": "TX",
    "supplier_number": "3",
    "supplier_food": [
      {
        "food": "Chicken",
        "country": "USA"
      },
      {
        "food": "Egg",
        "country": "Canada"
      },
      {
        "food": "Chicken",
        "country": "China"
      }
    ]
  },
  {
    "_id": {
      "$oid": "63530b26c8d4b3cf42b18480"
    },
    "supplier_name": "This supplier",
    "supplier_city": "Dallas",
    "supplier_state": "TX",
    "supplier_number": "2",
    "supplier_food": [
      {
        "food": "Orange"
```

```

        "food": "Orange",
        "country": "Mexico"
    },
    {
        "food": "Avocado",
        "country": "Mexico"
    }
]
},
{
    "_id": {
        "$oid": "63530b26c8d4b3cf42b18481"
    },
    "supplier_name": "Great Foods",
    "supplier_city": "Seattle",
    "supplier_state": "WA",
    "supplier_number": "6",
    "supplier_food": [
        {
            "food": "Orange",
            "country": "Mexico"
        },
        {
            "food": "Orange",
            "country": "USA"
        },
        {
            "food": "Banana",
            "country": "Panama"
        },
        {
            "food": "Banana",
            "country": "Italy"
        },
        {
            "food": "Frog legs",
            "country": "Hong Kong"
        },
        {
            "food": "Frog legs",
            "country": "France"
        }
    ]
}
]
}

```

