

# NoSQL

## Part 2

1. Create a collection by name Customers with the following attributes.Cust\_id, Acc\_Bal, Acc\_Type
2. Insert at least 5 values into the table
3. Write a query to display those records whose total account balance is greater than 1200 of account type 'Z' for each customer\_id.
4. Determine Minimum and Maximum account balance for each customer\_id.

### Create Database

```
db.createCollection("Customers");
```

```
Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.createCollection("customer");  
{ ok: 1 }
```

### Insert Values

```
db.customer.insert({custid:1,accbalance:10000,acctype:'A'});  
db.customer.insert({custid:1,accbalance:20000,acctype:'Y'});  
db.customer.insert({custid:1,accbalance:30000,acctype:'Z'});  
db.customer.insert({custid:2,accbalance:40000,acctype:'A'});  
db.customer.insert({custid:2,accbalance:80000,acctype:'A'});  
db.customer.insert({custid:2,accbalance:15000,acctype:'A'});  
db.customer.insert({custid:3,accbalance:25000,acctype:'A'});  
db.customer.insert({custid:3,accbalance:30000,acctype:'A'});  
db.customer.insert({custid:3,accbalance:9000,acctype:'A'});
```

```

Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.customer.insert({custid:1,accbalance:10000,acctype:'A'});
DeprecationWarning: Collection.insert() is deprecated. Use insertOne, insertMany, or bulkWrite.
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cf612ddff1f75d350b5057") }
}
Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.customer.insert({custid:1,accbalance:20000,acctype:'Y'});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cf6189dff1f75d350b5058") }
}
Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.customer.insert({custid:1,accbalance:30000,acctype:'Z'});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cf619bdff1f75d350b5059") }
}
Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.customer.insert({custid:2,accbalance:40000,acctype:'A'});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cf61d7dff1f75d350b505a") }
}
Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.customer.insert({custid:2,accbalance:80000,acctype:'Y'});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cf61e8dff1f75d350b505b") }
}
Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.customer.insert({custid:2,accbalance:15000,acctype:'Z'});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cf61ffdff1f75d350b505c") }
}
Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.customer.insert({custid:3,accbalance:25000,acctype:'A'});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cf6214dff1f75d350b505d") }
}
Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.customer.insert({custid:3,accbalance:30000,acctype:'Y'});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cf622fdff1f75d350b505e") }
}
Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.customer.insert({custid:3,accbalance:9000,acctype:'Z'});
{
  acknowledged: true,
  insertedIds: { '0': ObjectId("63cf6249dff1f75d350b505f") }
}

```

```
Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.customer.find()
```

```
[
  {
    _id: ObjectId("63cf612ddff1f75d350b5057"),
    custid: 1,
    accbalance: 10000,
    acctype: 'A'
  },
  {
    _id: ObjectId("63cf6189dff1f75d350b5058"),
    custid: 1,
    accbalance: 20000,
    acctype: 'Y'
  },
  {
    _id: ObjectId("63cf619bdff1f75d350b5059"),
    custid: 1,
    accbalance: 30000,
    acctype: 'Z'
  },
  {
    _id: ObjectId("63cf61d7dff1f75d350b505a"),
    custid: 2,
    accbalance: 40000,
    acctype: 'A'
  },
  {
    _id: ObjectId("63cf61e8dff1f75d350b505b"),
    custid: 2,
    accbalance: 80000,
    acctype: 'Y'
  },
  {
    _id: ObjectId("63cf61ffdff1f75d350b505c"),
    custid: 2,
    accbalance: 15000,
    acctype: 'Z'
  },
  {
    _id: ObjectId("63cf6214dff1f75d350b505d"),
    custid: 3,
    accbalance: 25000,
    acctype: 'A'
  },
  {
    _id: ObjectId("63cf622fdff1f75d350b505e"),
    custid: 3,
    accbalance: 30000,
    acctype: 'Y'
  },
  {
    _id: ObjectId("63cf6249dff1f75d350b505f"),
    custid: 3,
    accbalance: 9000,
    acctype: 'Z'
  }
]
```

## Queries

**1. Write a query to display those records whose total account balance is greater than 1200 of account type 'Z' for each customer\_id.**

```
db.customer.find({acctype:'Z',accbalance:{$gt:1200}})
```

```
Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.customer.find({acctype:'Z',accbal:{$gt:1200}})
Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.customer.find({acctype:'Z',accbalance:{$gt:1200}})
[
  {
    _id: ObjectId("63cf619bdf1f75d350b5059"),
    custid: 1,
    accbalance: 30000,
    acctype: 'Z'
  },
  {
    _id: ObjectId("63cf61ffdf1f75d350b505c"),
    custid: 2,
    accbalance: 15000,
    acctype: 'Z'
  },
  {
    _id: ObjectId("63cf6249df1f75d350b505f"),
    custid: 3,
    accbalance: 9000,
    acctype: 'Z'
  }
]
```

**2. Determine Minimum and Maximum account balance for each customer\_id.**

```
db.customer.aggregate([{$group: {_id:"$custid"},"accbalance":{$max:"accbalance"}}])
```

```
db.customer.aggregate([{$group: {_id:"$custid"},"accbalance":{$min:"accbalance"}}])
```

```
Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.customer.aggregate([{$group: {_id:"$custid"},"accbalance":{$max:"$accbalance"}}])
[
  { _id: 1, accbalance: 30000 },
  { _id: 2, accbalance: 80000 },
  { _id: 3, accbalance: 30000 }
]
Atlas atlas-iq9kv4-shard-0 [primary] lab9> db.customer.aggregate([{$group: { _id: "$custid", "accbalance": { $min: "$accbalance" } } }])
[
  { _id: 2, accbalance: 15000 },
  { _id: 1, accbalance: 10000 },
  { _id: 3, accbalance: 9000 }
]
```

**3. Export the created collection into local file system**

```
F:\mongodb>mongoexport mongodb+srv://revanth10:revanth@cluster0.dyo62sf.mongodb.net/week10 --collection=customers --out F:\mongodb\Downloads\customeroutput.json
```

```
2023-01-24T18:25:41.177+0530 connected to: mongodb+srv://[**REDACTED**]@cluster0.dyo62sf.mongodb.net/week10
2023-01-24T18:25:41.691+0530 exported 8 records
```

**4. Drop the table**

```
db.customer.drop();
```

```
Atlas atlas-125fdy-shard-0 [primary] week10> db.Customers.drop();
true
Atlas atlas-125fdy-shard-0 [primary] week10>
```

**5. Import a given csv dataset from local file system into mongodb collection.**

```
2023-01-24T18:33:21.636+0530    connected to: mongodb+srv://[**REDACTED**]@cluster0.dyo62sf.mongodb.net/week10
2023-01-24T18:33:22.074+0530    8 document(s) imported successfully. 0 document(s) failed to import.
```