

```

package connection;
import org.bson.Document;
import com.mongodb.client.FindIterable;
import com.mongodb.client.MongoClient;
import com.mongodb.client.MongoClients;
import com.mongodb.client.MongoCollection;
import com.mongodb.client.MongoDatabase;
import com.mongodb.client.MongoIterable;

public class collection_two {
    public static void main(String[] args) {
        // Creating a Mongo client
        MongoClient mongoClient = MongoClients.create("mongodb://localhost:27017");
        MongoDatabase database = mongoClient.getDatabase("myDb");
        MongoCollection<Document> collection = database.getCollection("products");
        Document priceRangeQuery = new Document("price", new Document("$gte",
700).append("$lte", 900));
        FindIterable<Document> products = collection.find(priceRangeQuery);
        for (Document product : products) {
            System.out.println(product.toJson());
        }
    }
}

```

```

> db.products.find({
  price: { $gte: 700, $lte: 900 }
})
< {
  _id: 1,
  name: 'xPhone',
  price: 799,
  releaseDate: 2011-05-14T00:00:00.000Z,
  spec: {
    ram: 4,
    screen: 6.5,
    cpu: 2.66
  },
  color: [
    'white',
    'black'
  ],
  storage: [
    64,
    128,
    256
  ]
}
{
  _id: 2,
  name: 'xTablet',
  price: 899,
  releaseDate: 2011-09-01T00:00:00.000Z,

```

```

package connection;
import java.util.Arrays;

import org.bson.Document;

import com.mongodb.client.AggregateIterable;
import com.mongodb.client.FindIterable;
import com.mongodb.client.MongoClient;
import com.mongodb.client.MongoClients;
import com.mongodb.client.MongoCollection;
import com.mongodb.client.MongoDatabase;
import com.mongodb.client.MongoIterable;

public class collection_two {
    public static void main(String[] args) {
        // Creating a Mongo client
        MongoClient mongoClient = MongoClient.create("mongodb://localhost:27017");
        MongoDatabase database = mongoClient.getDatabase("myDb");
        MongoCollection<Document> collection = database.getCollection("products");
        AggregateIterable<Document> result = collection.aggregate(Arrays.asList(
            new Document("$match", new Document("price", new Document("$ne",
null))), // filter documents where price is not null
            new Document("$group", new Document("_id", null)
                .append("totalPrice", new Document("$sum", "$price"))
                .append("count", new Document("$sum", 1)))
        ));

        for (Document doc : result) {
            System.out.println("Total Price: " + doc.getInteger("totalPrice"));
            System.out.println("Count: " + doc.getInteger("count"));
        }
    }
}

```

```

> db.products.aggregate([
  { $match: { price: { $ne: null } } },
  {
    $group: {
      _id: null,
      totalPrice: { $sum: "$price" },
      count: { $sum: 1 }
    }
  }
])
< {
  _id: null,
  totalPrice: 3895,
  count: 5
}

```

```

package connection;
import java.util.Arrays;

import org.bson.Document;

import com.mongodb.client.AggregateIterable;
import com.mongodb.client.FindIterable;
import com.mongodb.client.MongoClient;
import com.mongodb.client.MongoClients;
import com.mongodb.client.MongoCollection;
import com.mongodb.client.MongoDatabase;
import com.mongodb.client.MongoIterable;

public class collection_two {
    public static void main(String[] args) {
        // Creating a Mongo client
        MongoClient mongoClient = MongoClient.create("mongodb://localhost:27017");
        MongoDatabase database = mongoClient.getDatabase("myDb");
        MongoCollection<Document> collection = database.getCollection("sales");
        AggregateIterable<Document> result = collection.aggregate(Arrays.asList(
            new Document("$sort", new Document("item", 1).append("price", -1)),
            new Document("$group", new Document("_id", "$item")
                .append("maxPrice", new Document("$first", "$price"))
                .append("document", new Document("$first", "$$ROOT"))),
            new Document("$replaceRoot", new Document("newRoot", "$document"))
        ));

        for (Document doc : result) {
            System.out.println(doc.toJson());
        }
    }
}

```

```
> db.sales.aggregate([
  { $sort: { item: 1, price: -1 } },
  {
    $group: {
      _id: "$item",
      maxPrice: { $first: "$price" },
      document: { $first: "$$ROOT" }
    }
  },
  {
    $replaceRoot: { newRoot: "$document" }
  }
])
< {
  _id: 7,
  item: 'Lattes',
  price: 25,
  size: 'Tall',
  quantity: 30,
  date: 2022-02-21T10:08:00.000Z
}
{
  _id: 4,
  item: 'Mochas',
  price: 25,
  size: 'Tall',
  quantity: 11,
  date: 2022-02-17T08:00:00.000Z
}
```

