Group C: Assignment No.2

Execute at least 10 queries on above MongoDB database that demonstrates following querying techniques:

- **Find**
- **FindOne (specific values)**
- **Conditional queries**

(Query conditionals, OR queries, $not, Conditional semantics)

- **Type-specific queries (Null, Regular expression, Querying arrays)**

1) find()

```
> show collections;
customer
order_details
orders
product
> db.customer.find()
{ "_id" : 1, "name" : "yash", "mobile" : "9898989877", "city" : "pune", "email" : "akash@gmail.com" }
{ "_id" : 2, "name" : "rahul", "mobile" : "9818989877", "city" : "delhi", "email" : "rahul@gmail.com" }
{ "_id" : 3, "name" : "manan", "mobile" : "9866689877", "city" : "mumbai", "email" : "manan@gmail.com" }
{ "_id" : 4, "name" : "atharva", "mobile" : "9861189877", "city" : "pune", "email" : "atharva@gmail.com" }
{ "_id" : 5, "name" : "soham", "mobile" : "9861182227", "city" : "pune", "email" : "soham@gmail.com" }
> db.orders.find()
{ "_id" : ObjectId("5fb79695dedd9d01f765da1b"), "c_id" : 1, "amount" : 12499 }
{ "_id" : ObjectId("5fb796b1dedd9d01f765da1c"), "c_id" : 2, "amount" : 50 }
{ "_id" : ObjectId("5fb796ccdedd9d01f765da1d"), "c_id" : 3, "amount" : 30200 }
> db.order_details.find()
{ "_id" : ObjectId("5fb797e5dedd9d01f765da20"), "c_id" : 1, "p_id" : 4, "quantity" : 1 }
{ "_id" : ObjectId("5fb79801dedd9d01f765da21"), "c_id" : 2, "p_id" : 3, "quantity" : 5 }
{ "_id" : ObjectId("5fb79831dedd9d01f765da22"), "c_id" : 3, "p_id" : 1, "quantity" : 1 }
> db.product.find()
{ "_id" : 1, "p_id" : 1, "p_name" : "TV", "p_cost" : NumberLong(30200) }
{ "_id" : 2, "p_id" : 2, "p_name" : "shirt", "p_cost" : NumberLong(500) }
{ "_id" : 3, "p_id" : 3, "p_name" : "pen", "p_cost" : NumberLong(500) }
{ "_id" : 4, "p_id" : 4, "p_name" : "mobile", "p_cost" : NumberLong(12499) }
{ "_id" : 5, "p_id" : 5, "p_name" : "sneakers", "p_cost" : NumberLong(4499) }
```

2) find() - conditional,regex,$in

```
> db.customer.find({name:"yash"})
{ "_id" : 1, "name" : "yash", "mobile" : "9898989877", "city" : "pune", "email" : "akash@gmail.com" }
> db.customer.find({ _id :{ $in: [3,6]}})
{ "_id" : 3, "name" : "manan", "mobile" : "9866689877", "city" : "mumbai", "email" : "manan@gmail.com" }
> db.customer.find({"name": { $regex: /^m/}})
{ "_id" : 3, "name" : "manan", "mobile" : "9866689877", "city" : "mumbai", "email" : "manan@gmail.com" }
> db.customer.find({}{name:1,city:1})
uncaught exception: SyntaxError: missing ) after argument list :
@(shell):1:19
> db.customer.find({ }{name:1, city:1})
uncaught exception: SyntaxError: missing ) after argument list :
@(shell):1:20
> db.customer.find({ },{name:1, city:1})
{ "_id" : 1, "name" : "yash", "city" : "pune" }
{ "_id" : 2, "name" : "rahul", "city" : "delhi" }
{ "_id" : 3, "name" : "manan", "city" : "mumbai" }
{ "_id" : 4, "name" : "atharva", "city" : "pune" }
{ "_id" : 5, "name" : "soham", "city" : "pune" }
```

3) find() - store in cursor and printjson for each entry.

```
> var myCursor = db.customer.find({city:"pune"});myCursor.forEach(printjson);
{
        "_id" : 1,
        "name" : "yash",
        "mobile" : "9898989877",
        "city" : "pune",
        "email" : "akash@gmail.com"
}
{
        "_id" : 4,
        "name" : "atharva",
        "mobile" : "9861189877",
        "city" : "pune",
        "email" : "atharva@gmail.com"
}
{
        "_id" : 5,
        "name" : "soham",
        "mobile" : "9861182227",
        "city" : "pune",
        "email" : "soham@gmail.com"
}
```

4) findOne() and find() - $or, $and, $not, $nor, regex
   -findOne returns 1st correct entry found.

```
> db.product.findOne({$or: [{p_name:"TV"},{p_cost: {$gt: 20000}}]})
{ "_id" : 1, "p_id" : 1, "p_name" : "TV", "p_cost" : NumberLong(30200) }
> db.product.findOne({$or: [{p_name:"TV"},{p_cost: {$lt: 600}}]})
{ "_id" : 1, "p_id" : 1, "p_name" : "TV", "p_cost" : NumberLong(30200) }
> db.product.findOne({$or: [{p_cost: {$lt: 600}},{p_name: "TV"}]})
{ "_id" : 1, "p_id" : 1, "p_name" : "TV", "p_cost" : NumberLong(30200) }
> db.product.findOne({$or: [{p_cost: {$lt: 600}},{p_name: "mobile"}]})
{ "_id" : 2, "p_id" : 2, "p_name" : "shirt", "p_cost" : NumberLong(500) }
> db.customer.find({city: {$not: /^p/}})
{ "_id" : 2, "name" : "rahul", "mobile" : "9818989877", "city" : "delhi", "email" : "rahul@gmail.com" }
{ "_id" : 3, "name" : "manan", "mobile" : "9866689877", "city" : "mumbai", "email" : "manan@gmail.com" }
> db.customer.findOne({city: {$not: /^p/}})
{
        "_id" : 2,
        "name" : "rahul",
        "mobile" : "9818989877",
        "city" : "delhi",
        "email" : "rahul@gmail.com"
}
> db.customer.find({$or:[{city:"pune"},{name:"manan"}]})
{ "_id" : 1, "name" : "yash", "mobile" : "9898989877", "city" : "pune", "email" : "akash@gmail.com" }
{ "_id" : 3, "name" : "manan", "mobile" : "9866689877", "city" : "mumbai", "email" : "manan@gmail.com" }
{ "_id" : 4, "name" : "atharva", "mobile" : "9861189877", "city" : "pune", "email" : "atharva@gmail.com" }
{ "_id" : 5, "name" : "soham", "mobile" : "9861182227", "city" : "pune", "email" : "soham@gmail.com" }
> db.customer.findOne({$or:[{city:"pune"},{name:"manan"}]})
{
        "_id" : 1,
        "name" : "yash",
        "mobile" : "9898989877",
        "city" : "pune",
        "email" : "akash@gmail.com"
}
> db.customer.find({$and:[{city:"pune"},{name:"manan"}]})
> db.customer.find({$nor:[{city:"pune"},{name:"manan"}]})
{ "_id" : 2, "name" : "rahul", "mobile" : "9818989877", "city" : "delhi", "email" : "rahul@gmail.com" }
>
```