Experiment No.3 : MongoDB Queries - Design and Develop MongoDB Queries using CRUD operations. (Use CRUD operations, SAVE method,logical operators etc.).

Code:

```
{
    "_id": ObjectId("5f1d164d5a7c0d0a805b0752"),
    "name": "John",
    "age": 25,
    "grade": "A"
}
```

```
db.students.insert({
    "name": "Alice",
    "age": 22,
    "grade": "B"
});
```

```
db.students.find();
```

```
db.students.find({ "age": { $gt: 20 } });
```

```
// Find students who are older than 20 and have a grade of "A"
db.students.find({ $and: [{ "age": { $gt: 20 } }, { "grade": "A" }] });

// Find students who are older than 25 or have a grade of "A"
db.students.find({ $or: [{ "age": { $gt: 25 } }, { "grade": "A" }] });
```

```
// Return only names of students
db.students.find({}, { "name": 1, "_id": 0 });
```

```
db.students.update({ "name": "John" }, { $set: { "grade": "A+" } });
```

```
// Update grades for students older than 22
db.students.updateMany({ "age": { $gt: 22 } }, { $set: { "grade": "B" } })
```

```
db.students.deleteOne({ "name": "Alice" });
```

```
// Delete students younger than 23
db.students.deleteMany({ "age": { $lt: 23 } });
```

```
// If a student with the same _id exists, update it; otherwise, insert a
db.students.save({
    "_id": ObjectId("5f1d164d5a7c0d0a805b0752"),
    "name": "John",
    "age": 26,
    "grade": "A+"
});
```

Output:

```
{
    "_id": ObjectId("5f1d164d5a7c0d0a805b0753"),
    "name": "Alice",
    "age": 22,
    "grade": "B"
}
```

```
[
    {
        "_id": ObjectId("5f1d164d5a7c0d0a805b0752"),
        "name": "John",
        "age": 25,
        "grade": "A+"
    },
    {
        "_id": ObjectId("5f1d164d5a7c0d0a805b0753"),
        "name": "Alice",
        "age": 22,
        "grade": "B"
    }
]
```

```
[
    {
        "_id": ObjectId("5f1d164d5a7c0d0a805b0752"),
        "name": "John",
        "age": 25,
        "grade": "A+"
    },
    {
        "_id": ObjectId("5f1d164d5a7c0d0a805b0753"),
        "name": "Alice",
        "age": 22,
        "grade": "B"
    }
]
```

```
[
    {
        "_id": ObjectId("5f1d164d5a7c0d0a805b0752"),
        "name": "John",
        "age": 25,
        "grade": "A+"
    }
]
```

```
[
    {
        "name": "John"
    },
    {
        "name": "Alice"
    }
]
```