Mongo DB CRUD Operations

Sample Record:

```
{
    name: "Jane Smith",
    position: "Software Engineer",
    salary: 80000,
    hireDate: ISODate("2020-01-15T00:00:00Z"),
    department: "Engineering"
}
```

Create

Create a Database named employee_db

```
use employee_db
```

Create a Collection named Employees

```
db.createCollection(“employees”);
```

Insert Document

```
db.employees.insertOne({
    name: "Jane Smith",
    position: "Software Engineer",
    salary: 80000,
    hireDate: ISODate("2020-01-15T00:00:00Z"),
    department: "Engineering"
})
```

Query:

Find employees in the "Engineering" department:

```
db.employees.find( { department: “Engineering” })
```

Find employees with a salary greater than 70000:

```
db.employees.find( { salary: { $gt: 70000} } )
```

Find employees with a salary lesser than 50000:

```
db.employees.find( { salary: { $lt: 50000 } } )
```

Find employees with a salary between 55000 and 65000:

```
db.employees.find( { salary: { $lte: 55000, $gte: 65000 } } )
```

Find employees hired after January 1, 2020:

```
db.employees.find( { hireDate: {  $gt: new Date(“2020-01-01”) } } )
```

Find employees whose names start with "J":

```
db.employees.find( { name : /^J/ } )
```

Update Documents:

Increase salary of employee named "Jane Smith" by 5000

```
db.employees.updateOne(    // Updates the first document that matches the filter.
{ name: “Jane Smith” },
{ $inc: { salary: 5000 } } // Increase salary by 5000
)
```

Change department name "Engineering" to "Tech" in all employee records

```
db.employees.updateMany(   // Updates all documents that match the filter.
{ department: “Engineering” },
{ $set: { department: “Tech” }
)
```

Replace "Jane Smith" record.

```
db.employees.replaceOne(   // Replaces the entire document that matches the filter.
{ name: “Jane Smith” },
{
   name: "Jane Smith",
   position: "Senior Software Engineer",
   salary: 95000,
   hireDate: ISODate("2021-01-15T00:00:00Z"),
   department: "Tech"
})
```

Delete Documents (Delete):

Delete record for "Jane Smith"

```
db.employees.deleteOne( { name: “Jane Smith” } )
```

Delete all records in Tech department

```
db.employess.deleteMany( { department: “Tech” } )
```