

## WHERE Clause Equivalent in MongoDB

In SQL:

```
sql
```

```
SELECT * FROM students WHERE age > 21;
```

In MongoDB:

```
javascript
```

```
db.students.find({ age: { $gt: 21 } })
```

---

## PROGRAM: Insert, Query (WHERE), Update, Delete — in mongosh (Command Prompt)

### ◆ 1. Connect & Use Database

```
bash
```

```
mongosh
```

```
javascript
```

```
use Student_Data
```

---

### ◆ 2. Insert Multiple Documents

```
javascript
```

```
db.students.insertMany([
  { name: "Rahul", age: 22, course: "MCA", marks: 75 },
  { name: "Asha", age: 23, course: "BCA", marks: 80 },
  { name: "Vikram", age: 20, course: "BSc", marks: 60 },
  { name: "Sneha", age: 21, course: "MCA", marks: 85 }
])
```

---

### ◆ 3. WHERE Clause Equivalent (Query)

```
javascript
```

```
// Find students with age > 21
```

```
db.students.find({ age: { $gt: 21 } })
```

```
// Find students in MCA
```

```
db.students.find({ course: "MCA" })
```

```
// Find students with marks between 70 and 90
```

```
db.students.find({ marks: { $gte: 70, $lte: 90 } })
```

---

#### ◆ 4. Update a Document

javascript

```
// Update Sneha's course to 'MSc'
```

```
db.students.updateOne({ name: "Sneha" }, { $set: { course: "MSc" } })
```

---

#### ◆ 5. Delete a Document

javascript

```
// Delete student named Vikram
```

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

---

#### ◆ 6. Show All Data

javascript

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

---

### Same Operations in MongoDB Compass

#### ◆ 1. Create Database and Collection

- Open Compass → Click **"Create Database"**
  - Database Name: Student\_Data

- Collection Name: students
  - Click **Create**
- 

## ◆ 2. Insert Documents

- Go to students collection
- Click "**Insert Document**"
- Insert:

json

```
{  
  "name": "Rahul",  
  "age": 22,  
  "course": "MCA",  
  "marks": 75  
}
```

- Insert other documents similarly.
- 

## ◆ 3. WHERE Clause Equivalent (Find with Filter)

In the **Filter** bar, use:

- Age > 21:

json

```
{ "age": { "$gt": 21 } }
```

- Course = MCA:

json

```
{ "course": "MCA" }
```

- Marks between 70 and 90:

json

```
{ "marks": { "$gte": 70, "$lte": 90 } }
```

Click **"Find"** to view results.

---

◆ **4. Update a Document**

- Find the document
  - Click the **pencil icon**
  - Edit "course": "MCA" to "course": "MSc"
  - Click **Update**
- 

◆ **5. Delete a Document**

- Find the document for Vikram
  - Click **trash bin icon** to delete
- 

◆ **6. View All Documents**

- Click **Documents** tab to see all inserted data.