

# The `_id` field

## 1. `_id` field

- a. It is a primary key.
- b. It uniquely identifies documents in a collection.
- c. It is either provided in a document. If it is not provided, it is automatically created by MongoDB.
- d. No two documents within a collection can have the same `_id` field value.

## 2. Inserting document with `_id` field.

- a. While inserting a document in a collection, a unique `_id` field value can be provided.

### b. Syntax

```
db.<collection>.insert({_id: <unique_value>, ...})
```

### c. Example

```
db.dep.insert({_id:1, name: "Finance", location: "Mumbai"})
```

## 3. Inserting document without `_id` field.

- a. If `_id` field is not provided, then MongoDB automatically creates one.

### b. Syntax

```
db.<collection>.insert(<document>)
```

### c. Example

```
db.dep.insert({name:'Marketing', location:'Delhi'})
```

- d. The `_id` field value created by MongoDB is unique and is of **ObjectId** type.
  - i. **ObjectId** is a BSON type that represents a hexadecimal string.
  - ii. **ObjectId** contains a timestamp value, a random value, and an incrementing counter value to uniquely identify a document.

## 4. Document insertion order.

- a. Documents are by default inserted in an ordered manner.

### i. Example

```
db.dep.insert([{_id:2, name:"Sales", location:"Mumbai"},
```

```
{_id:3, name:"Operations", location:"Delhi"},  
{_id:4, name:"HR", location:"Mumbai"}])
```

- b. Documents can be inserted in an unordered manner using the **ordered** option.

**i. Example**

```
db.dep.insert([{_id:2, name:"Sales", location:"Mumbai"},  
{_id:3, name:"Operations", location:"Delhi"},  
{_id:4, name:"HR", location:"Mumbai"}],  
{ordered:false})
```