

# No SQL Part 3

# Working with arrays -find

A cursor method to arrange  
the results as arrays

```
db.movies.find({genres:"Drama"},{_id:0,title:1,genres:1}).toArray()
```

Can be used in arrays

```
db.movies.find({genres:["Drama","Crime"]},{_id:0,title:1,genres:1}).toArray()
```

Search for the exact match in the array

```
db.movies.find({genres:{all:["Drama","Comedy"]}},{_id:0,title:1,genres:1}).toArray()
```

Search for an array that includes the values but can include more

# Working with arrays

```
db.movies.updateOne({title:"The Godfather"},{"$push":{"genres":"Classic"}})
```

← Add to an array

```
db.movies.updateOne({title:"The Godfather"},{"$pull":{"genres":"Classic"}})
```

← Remove from an array

to access the  $n^{\text{th}}$  element of the array :  
"Array\_name.n"  
\$position : n

# Connections between Collections

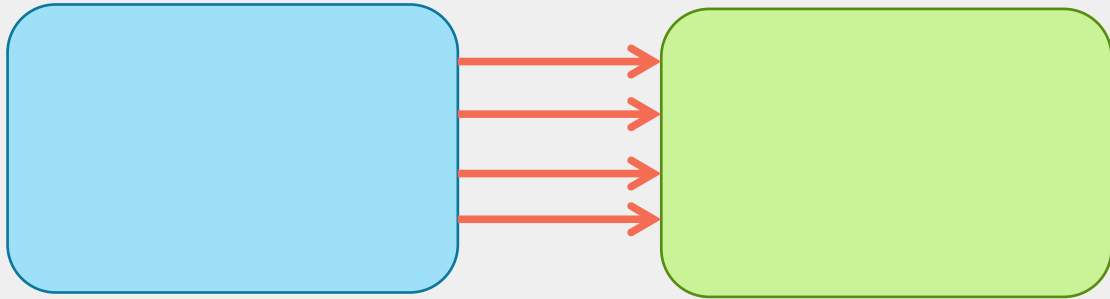
Nesting	Reference
Fast query +	Slow query -
Duplicate data -	No duplicate data +

```
{
  "name": "Cookie Monster",
  "age": 102,
  "purchased": [
    {"_id": 1234, "name": "chocolate cookie", "price": 3},
    {"_id": 5678, "name": "milk", "price": 5},
    {"_id": 3579, "name": "kinder egg", "price": 12}]
}
```

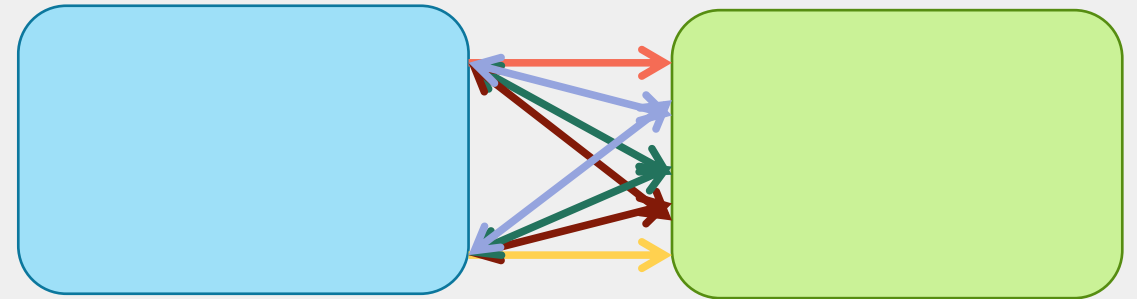
```
{
  "name": "Cookie Monster",
  "age": 102,
  "purchased": [1234, 5678, 3579]
}
```

# Connections between Collections

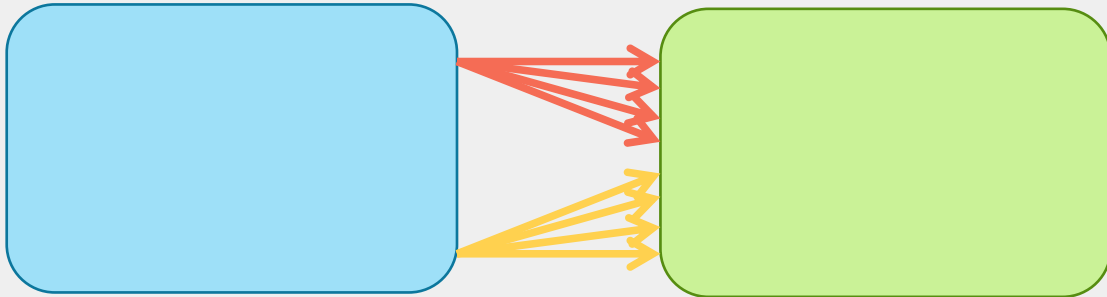
One to one



Many to many



One to many



# Connections between Collections

## aggregate

```
db.childCollection.aggregate({$lookup:  
  {  
    from: "parentCollection",  
    localField: "FieldInChild",  
    foreignField: "fieldInParent",  
    as: "alias"}  
  })
```

# Connections between Collections

## Aggregate many to many with \$project

```
db.coll1.aggregate([
  {
    $lookup: {
      from: "coll2",
      localField: "fieldInColl1",
      foreignField: "fieldInColl2",
      as: "alias"
    }
  },
  {
    $project: {
      keyFromColl1: 1
      ...|
      "alias.keyFromColl2": 1
    }
  }
]);
```