## Relationships:

**Embedded Relationship:** When one collection is acting as a attribute of the other collection then it is known as embedded. This is also known as **One-to-One Relationship**

**Document Reference Relationships**: When we refer my one collection document into the other collection document

**Many-to-Many Relationship**: When one collection having multiple documents connected to another collection with multiple documents.

**One-to-Many Relationship**:

student {

stud\_name: “Viren”,

Id: 101,

Branch: “IT”

}

Address {

stud\_name: “Viren”,

perm\_address: “Delhi”,

City: “Delshi”,

Picode: 110001

}

office\_address {

stud\_name: “Viren”,

office\_address: “Chandigarh”,

City: “Chandigarh”,

Picode: 210001

}

**One-to-One Example**:

db.studentOTO.insetOne( {

“Stud\_name” : “Viren”,

“Id”: 101,

“Branch”: “IT”,

“Permanent\_address” : {

“Perm\_address” : “Delhi”,

“City” : “Delhi”,

“Pincode” : 110001

}

});

**One-to-Many Example**:

db.studentOTM.insetOne( {

“Stud\_name” : “Viren”,

“Id”: 101,

“Branch”: “IT”,

“Permanent\_address” : [

{

“Perm\_address” : “Delhi”,

“City” : “Delhi”,

“Pincode” : 110001

},

{

office\_address: “Chandigarh”,

City: “Chandigarh”,

Pincode: 210001

}

]

});

Query to get all the cities of a student:

db.studentOTM.find( { “stud\_name” : “Viren” }, { “permanent\_address.city” : 1 });

**Document Reference:**

db.address1.insertOne( {

\_id : 102,

Street: “Down Street”,

House: “11/2”,

City: “New York”,

Country : “USA”

});

db.employee1.insertOne( {

Firstname: “John”,

Lastname: “King”,

Email : “[abc@gmail.com](mailto:abc@gmail.com)”,

Salary : 45000,

Address1 : 102 → we need to specify the collection name and the primary key id

} );

Var addrID = db.employee1.findOne( { “firstname” : “John” }).address1;

// here in addrID we are storing the reference (memory address)

db.address1.findOne( { \_id : addrID } ); // finding the document using the reference

**Another example of Document Reference:**

db.Address.insert ( { “\_id” : 11, city : “Delhi” });

db.Address.insert ( { “\_id” : 12, city : “Chandigarh” });

db.student.insert( {

“\_id” : 1,

“First\_name” : “Ravi”,

“address\_ID” : {

“$ref” : Address,

“$id” : 11,

“$db” : “learnbay”

}

});

db.student.insert ( {

“\_id” : 2,

First\_name : “Viren”,

“Address\_ID” : {

“$ref” : Address,

“$id” : 12,

“$db” : “learnbay”

}

} );