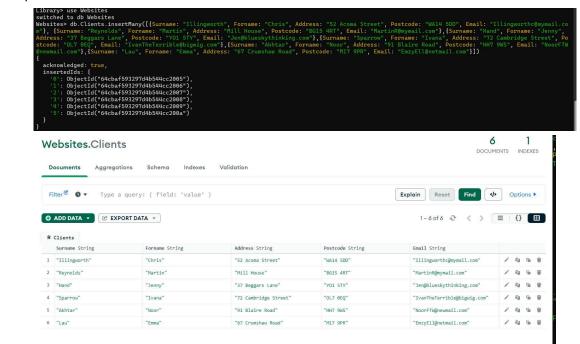
MongoDB	MDB1
MongoDB Exercises	Due: 8 th August 2023
Develop skills in setting up mongoDB databases, collections and documents.	
Perform CRUD operations on mongoDB collections.	
Evidence: Annotated Screenshots	

Create a Database in mongoDB

- 1. Create a new mongoDB Database called Websites
- 2. Create a collection called *Clients*
- 3. Add the following records

		Address		
Surname	Forename		Postcode	Email
Illingworth	Chris	52 Acoma Street	WA14 5DD	Illingworthc@mymail.com
Reynolds	Martin	Mill House	BG15 4RT	MartinR@mymail.com
Hand	Jenny	37 Beggars Lane	YO1 5TY	Jen@blueskythinking.com
Sparrow	Ivana	72 Cambridge Street	OL7 0EQ	IvanTheTerrible@bigwig.com
Akhtar	Noor	91 Blaire Road	HH7 9WS	NoorFTW@newmail.com
Lau	Emma	67 Crumshaw Road	M17 9PR	EmzyEll@netmail.com

Here is the input, entered in shell using the "insertMany" command, and the result in shown Compass.



CRUD operations:

4. Add the following records one at a time (db.Clients.insertOne)

Meadows	Fiona	14 Tay Street	NM11 6DS	FiMeadow@mymail.com
Ali	Safdar	182 Valley Parade	BR7 8GH	SafdarAli@boringmail.com

5. Add the following records using insertMany

Godfrey	James	17A Mercy Street	PG11 3ER	JimmyGee@newmail.com	
Shaw	Max	218 Hollinwood Avenue	M17 5SD	MaxValue@openmail.com	

```
Websites> db.Clients.insertOne([{Surname: "Ali", Forname: "Safdar", Address: "182 Valley Parade", Postcode: "BR7 8GH", Email: "SafdarAli@boringemail.com"}])

{
    acknowledged: true,
    insertedId: ObjectId("64cbb1323297d4b544cc200b")
}

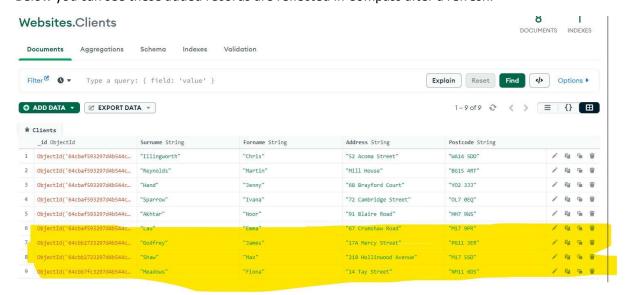
Websites> db.Clients.insertOne([{Surname: "Meadows", Forname: "Fiona", Address: "14 Tay Street", Postcode: "NM11 6DS", Email: "FIMeadow@mymail.com"}])
{
    acknowledged: true,
    insertedId: ObjectId("64cbb1943297d4b544cc200c")
}

Websites> db.Clients.insertMany([{Surname: "Godfrey", Forname: "James", Address: "17A Mercy Street", Postcode: "PG1 2ER", Email: "JimmyGee@newmail.com"},{Surname: "Shaw", Forname: "Max", Address: "218 Hollinwood Avenue", Postcode: "M17 5SD", Email: "MaxValue@openmail.com"}])

{
    acknowledged: true,
    insertedIds: {
        (0): ObjectId("64cbb2723297d4b544cc200e")
        /1': ObjectId("64cbb2723297d4b544cc200e")
}
}
```

Above you will see the "insertOne" command used to add a single record and again "insertMany" for 2 more.

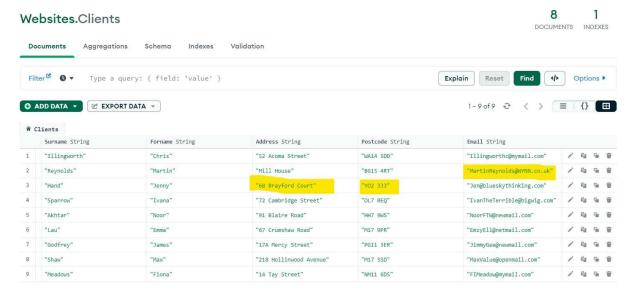
Below you can see these added records are reflected in Compass after a refresh.



6. Amend the following records as shown below

Reynolds	Martin	Mill House	BG15 4RT	MartinReynolds@WYNN.co.uk
Hand	Jenny	68 Brayford Court	YO2 3JJ	Jen@blueskythinking.com
{ acknowledged: insertedId: nu matchedCount: modifiedCount: upsertedCount: }	true, ill, 1, 0 ents.updateOn true, ill, 1,	e({Surname: "Reynolds"}, {\$se e({Surname: "Hand"}, {\$set: {		

Above you will see how the records have been updated, using the "Surname" to select it and the "\$set" instruction to make the ammendment to "Emai" for Mr Reynolds and "Address" and "Postcode" for Ms Hand.

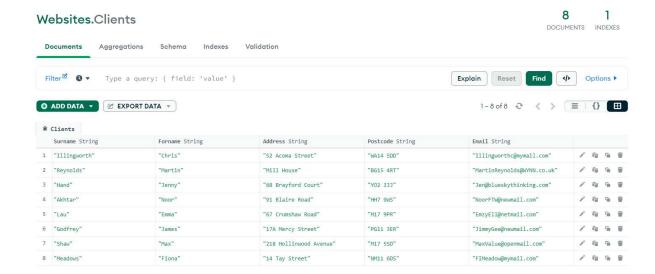


7. Delete the record for:

Sparrow	Ivana	72 Cambridge Street	OL7 0EQ	IvanTheTerrible@bigwig.com

```
Websites> db.Clients.deleteOne ({Surname: "Sparrow"})
{ acknowledged: true, deletedCount: 1 }
Websites>
```

8. Using mongoDB Shell, the final state of the data in the collection (most of it as it scrolled off screen) is shown below, followed by with the Compass version

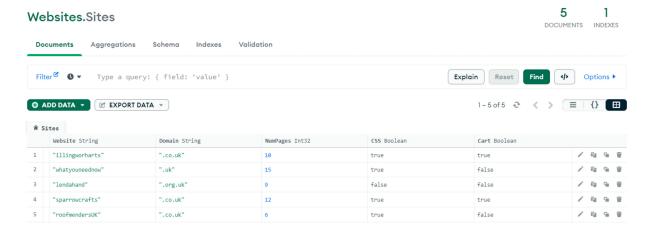


Consolidation task:

Create the following collection called Sites

JobNumber	Website	Domain	NumPages	css	Cart
ILL0001	illingwortharts	.co.uk	10	Yes	Yes
WHA0003	whatyouneednow	.uk	15	Yes	No
LEN0002	lendahand	.org.uk	9	No	No
SPA0006	sparrowcrafts	.co.uk	12	Yes	Yes
ROO0003	roofmendersUK	.co.uk	6	Yes	No

The Website collection was added (with a typo later corrected in Compass).



A good referent for querys:

https://www.w3schools.com/mongodb/mongodb query operators.php

For example a query that will search for .co.uk websites that will have a shopping cart.