Q-G
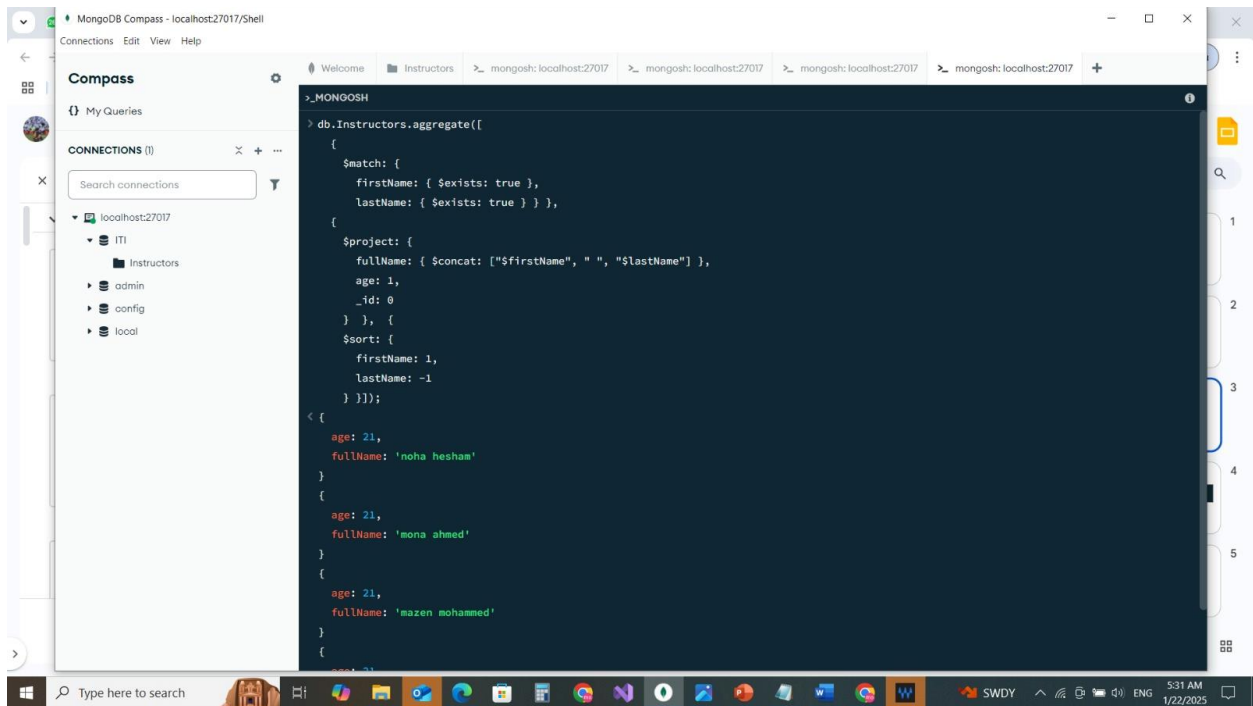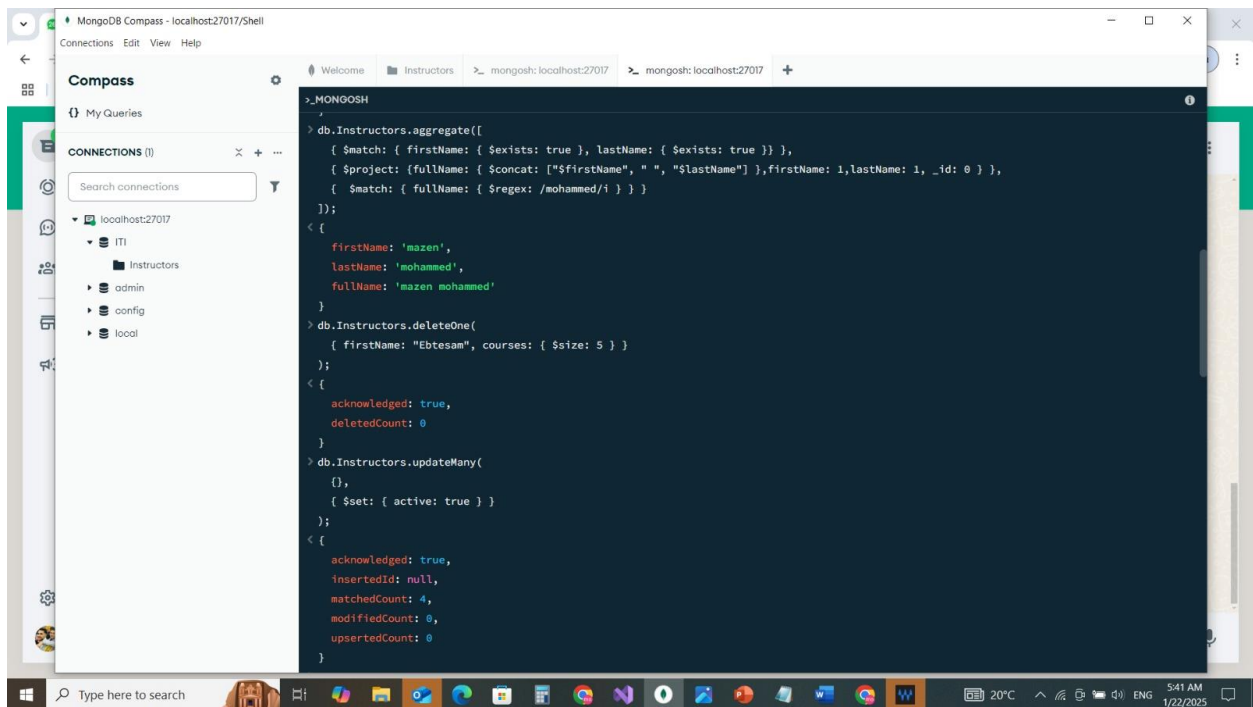
```
db.Instructors.aggregate([
    {
        $match: {
            firstName: { $exists: true },
            lastName: { $exists: true } } },
    {
        $project: {
            fullName: { $concat: ["$firstName", " ", "$lastName"] },
            age: 1,
            _id: 0
    } }, {
        $sort: {
            firstName: 1,
            lastName: -1
    } }]);
{
    age: 21,
    fullName: 'noha hesham'
}
{
    age: 21,
    fullName: 'mona ahmed'
}
{
    age: 21,
    fullName: 'mazen mohammed'
}
{
```

Q – H , I , J
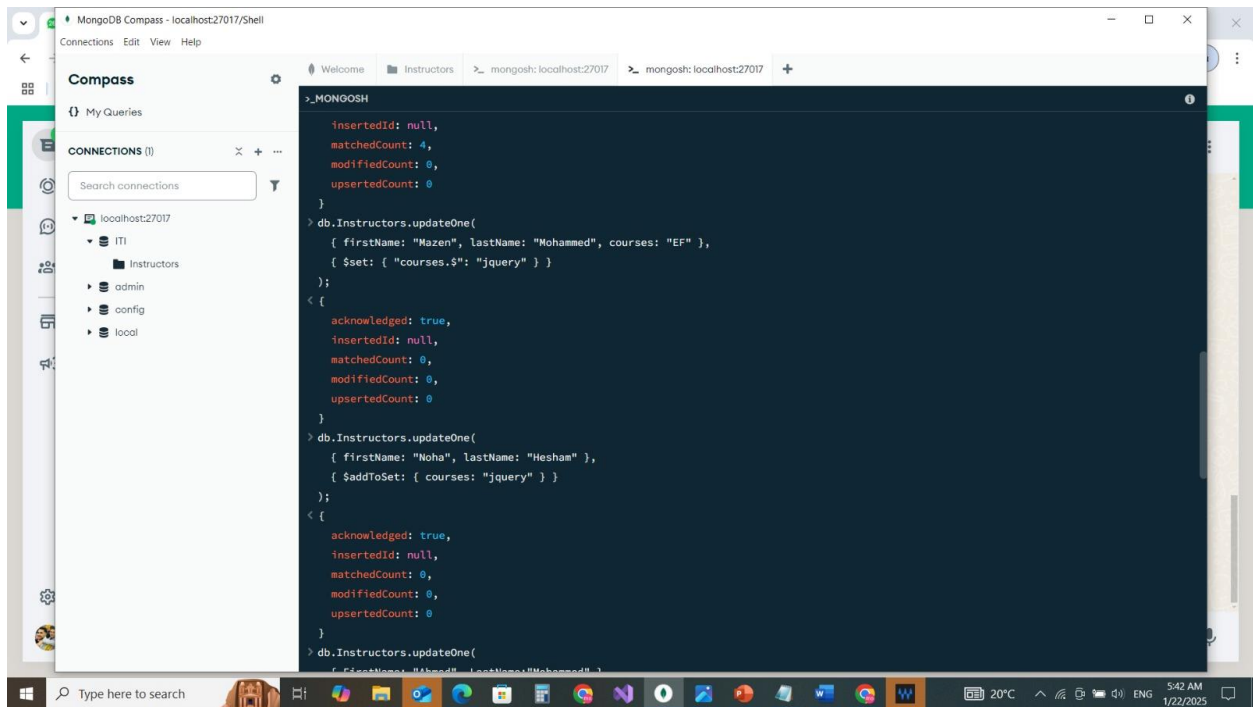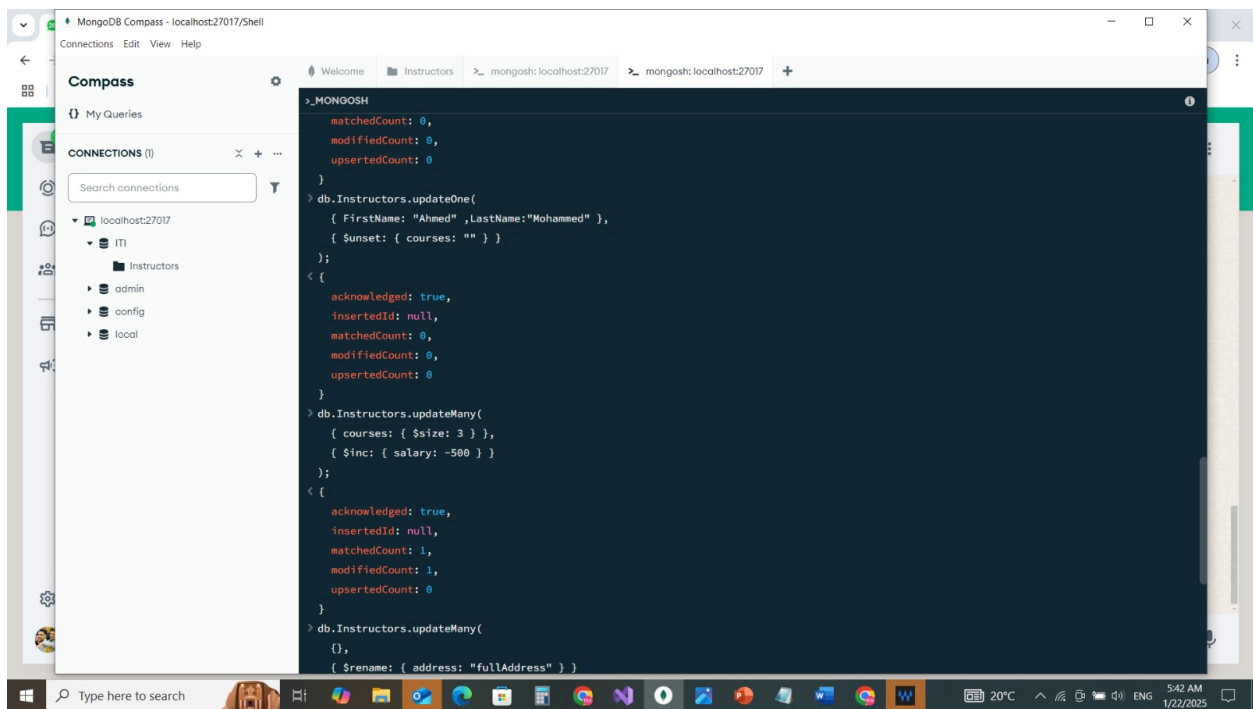
```
db.Instructors.aggregate([
    { $match: { firstName: { $exists: true }, lastName: { $exists: true }} },
    { $project: {fullName: { $concat: ["$firstName", " ", "$lastName"] },firstName: 1,lastName: 1, _id: 0 } },
    { $match: { fullName: { $regex: /mohammed/i } } }
]);
{
    firstName: 'mazen',
    lastName: 'mohammed',
    fullName: 'mazen mohammed'
}
db.Instructors.deleteOne(
    { firstName: "Ebtesam", courses: { $size: 5 } }
);
{
    acknowledged: true,
    deletedCount: 0
}
db.Instructors.updateMany(
    {},
    { $set: { active: true } }
);
{
    acknowledged: true,
    insertedId: null,
    matchedCount: 4,
    modifiedCount: 0,
    upsertedCount: 0
}
```
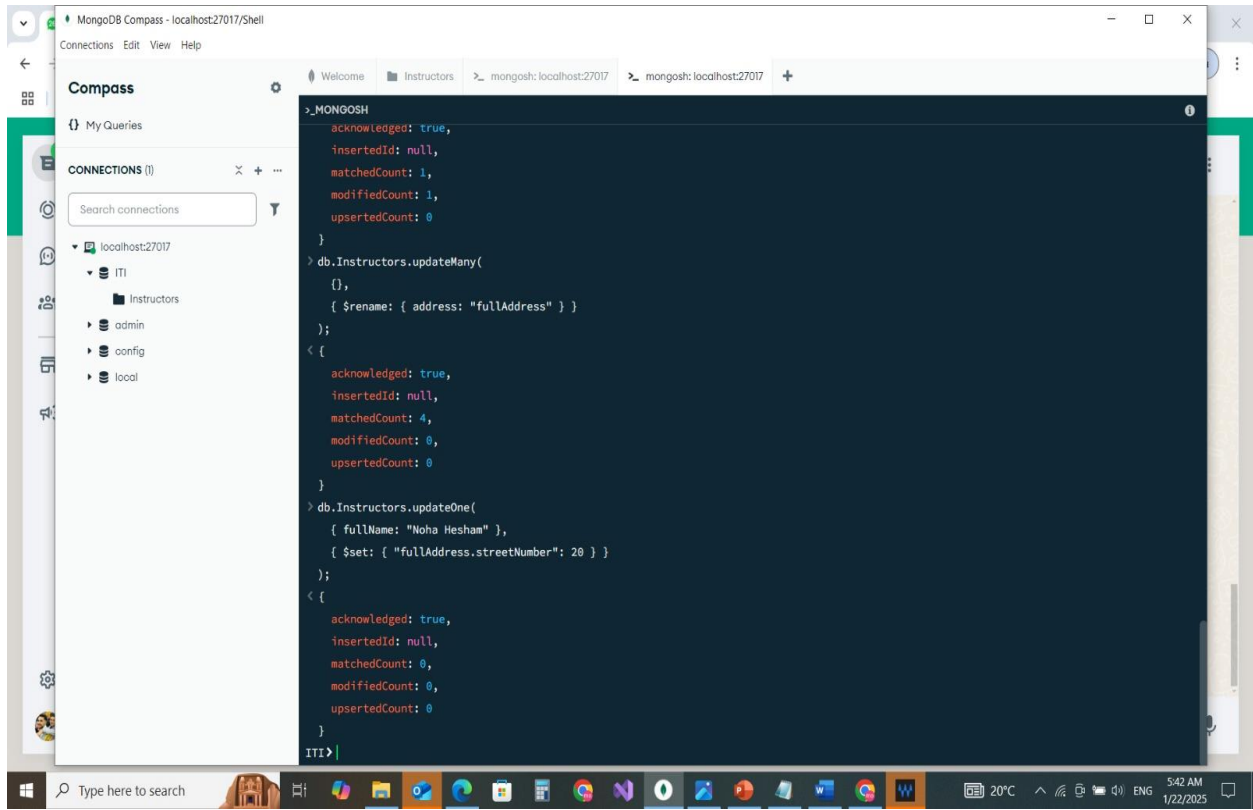
Q – K,L


```
>_MONGOSH                                                    ⓘ
      insertedId: null,
      matchedCount: 4,
      modifiedCount: 0,
      upsertedCount: 0
  }
> db.Instructors.updateOne(
    { firstName: "Mazen", lastName: "Mohammed", courses: "EF" },
    { $set: { "courses.$": "jquery" } }
  );
< {
      acknowledged: true,
      insertedId: null,
      matchedCount: 0,
      modifiedCount: 0,
      upsertedCount: 0
  }
> db.Instructors.updateOne(
    { firstName: "Noha", lastName: "Hesham" },
    { $addToSet: { courses: "jquery" } }
  );
< {
      acknowledged: true,
      insertedId: null,
      matchedCount: 0,
      modifiedCount: 0,
      upsertedCount: 0
  }
> db.Instructors.updateOne(
    { firstName: "Ahmed", lastName: "Mohammed" }
```

Q- M , N


```
>_MONGOSH                                                    ⓘ
      matchedCount: 0,
      modifiedCount: 0,
      upsertedCount: 0
  }
> db.Instructors.updateOne(
    { FirstName: "Ahmed" ,LastName:"Mohammed" },
    { $unset: { courses: "" } }
  );
< {
      acknowledged: true,
      insertedId: null,
      matchedCount: 0,
      modifiedCount: 0,
      upsertedCount: 0
  }
> db.Instructors.updateMany(
    { courses: { $size: 3 } },
    { $inc: { salary: -500 } }
  );
< {
      acknowledged: true,
      insertedId: null,
      matchedCount: 1,
      modifiedCount: 1,
      upsertedCount: 0
  }
> db.Instructors.updateMany(
    {},
    { $rename: { address: "fullAddress" } }
```

Q -O , P

التحديث او الإضافة او التعديل مرات بيكون بيكون ب 0 لاني بكون نفذت الامر اكتر من مرة فلما بنفذه تاني بيحدث جديد لانه بيكون اتحدث فعلا او اتحذف فعلا