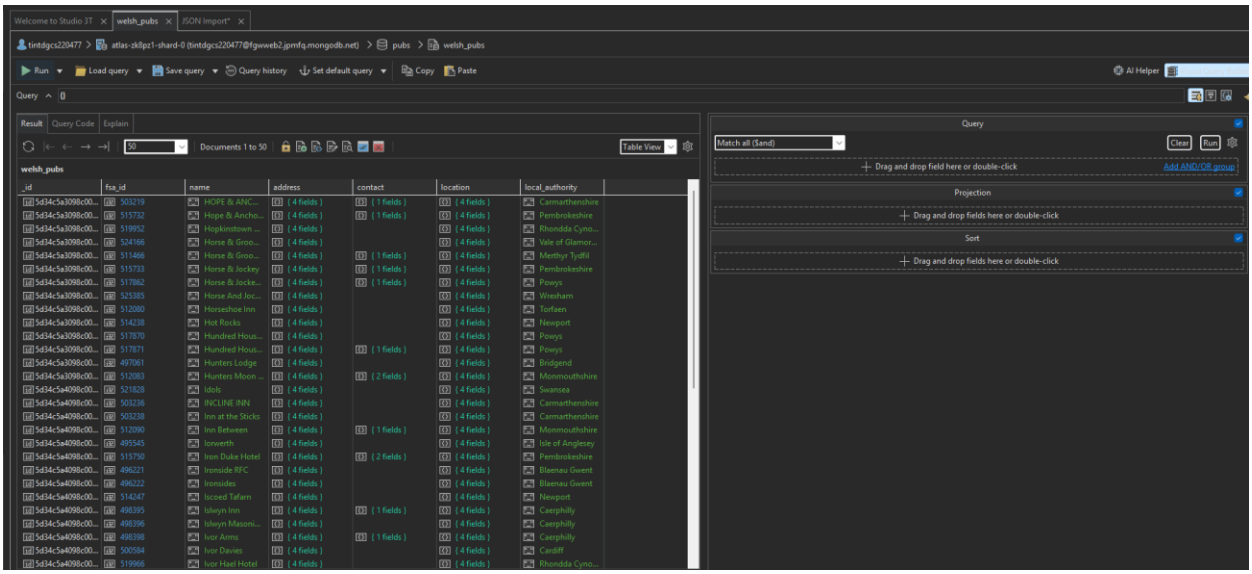
# MongoDB

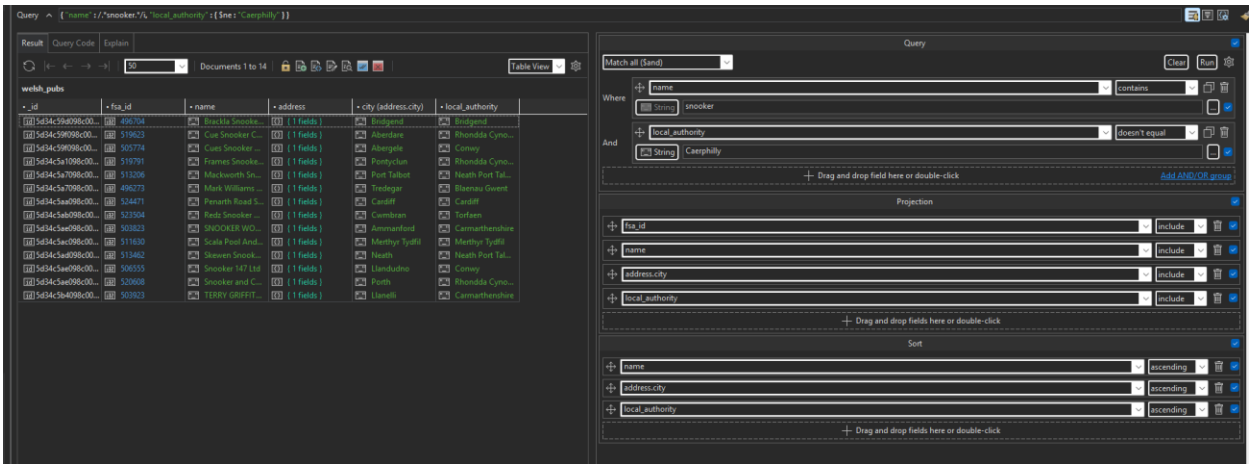
**Studio 3T**

MongoDB is a high
performance, flexible, and scalable NoSQL database system designed to efficiently manage a variety of d
ata types and structures, providing an adaptive and intuitive solution for modern data-driven applications

Task 4.1



Task 4.3



Task 4.4

welsh_pubs > local_authority

| _id | fsa_id | name | address | city (address.city) | local_authority |
|---|---|---|---|---|---|
| 5d34c59d098c00... | 496704 | Brackla Snooke... | { 1 fields } | Bridgend | Wales Snooker |
| 5d34c59f098c00... | 519623 | Cue Snooker C... | { 1 fields } | Aberdare | Wales Snooker |
| 5d34c59f098c00... | 505774 | Cues Snooker ... | { 1 fields } | Abergele | Wales Snooker |
| 5d34c5a1098c00... | 519791 | Frames Snooke... | { 1 fields } | Pontyclun | Wales Snooker |
| 5d34c5a7098c00... | 513206 | Mackworth Sn... | { 1 fields } | Port Talbot | Wales Snooker |
| 5d34c5a7098c00... | 496273 | Mark Williams ... | { 1 fields } | Tredegar | Wales Snooker |
| 5d34c5aa098c00... | 524471 | Penarth Road S... | { 1 fields } | Cardiff | Wales Snooker |
| 5d34c5ab098c00... | 523504 | Redz Snooker ... | { 1 fields } | Cwmbran | Wales Snooker |
| 5d34c5ac098c00... | 511630 | Scala Pool And... | { 1 fields } | Merthyr Tydfil | Wales Snooker |
| 5d34c5ad098c00... | 513462 | Skewen Snook... | { 1 fields } | Neath | Wales Snooker |
| 5d34c5ae098c00... | 506555 | Snooker 147 Ltd | { 1 fields } | Llandudno | Wales Snooker |
| 5d34c5ae098c00... | 520608 | Snooker and C... | { 1 fields } | Porth | Wales Snooker |
| 5d34c5ae098c00... | 503823 | TERRY GRIFFIT... | { 1 fields } | Ammanford | Wales Snooker |
| 5d34c5b4098c00... | 503923 | TERRY GRIFFIT... | { 1 fields } | Llanelli | Wales Snooker |

Task 5.1

```
1  select *
2  from welsh_pubs;
3  select local_authority
4  from welsh_pubs
5  group by local_authority
6  order by count(*) desc;
```

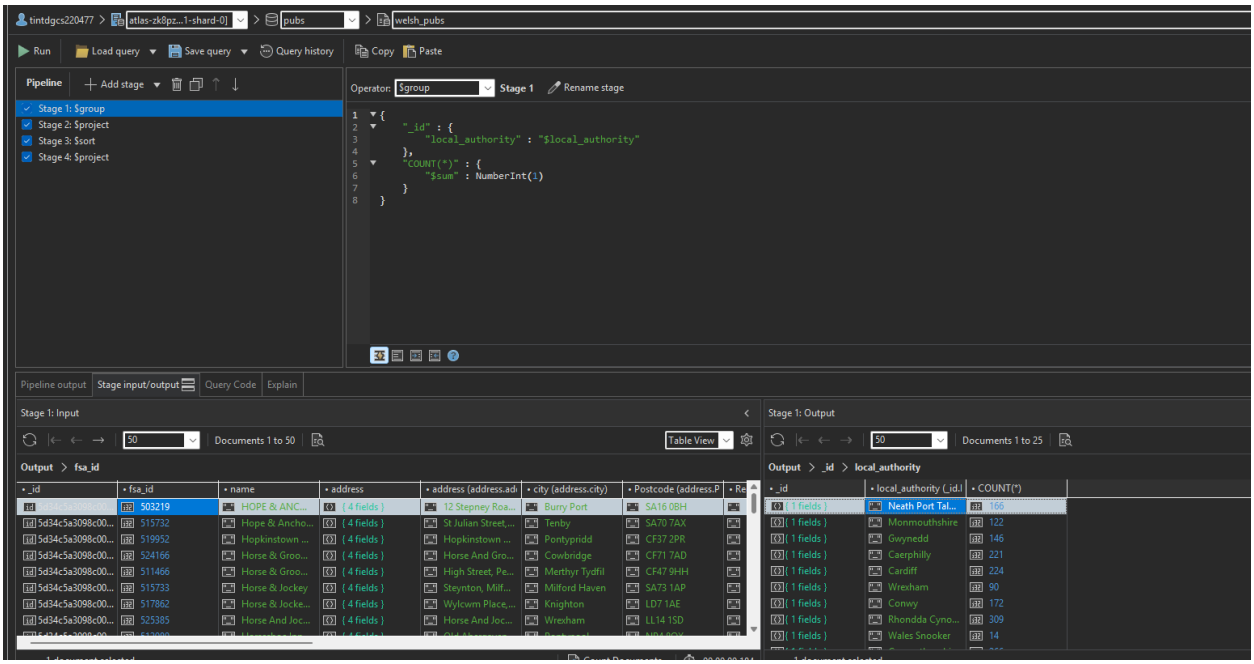
Result | SQL Query | Query Code | Explain

50 | Documents 1 to 25

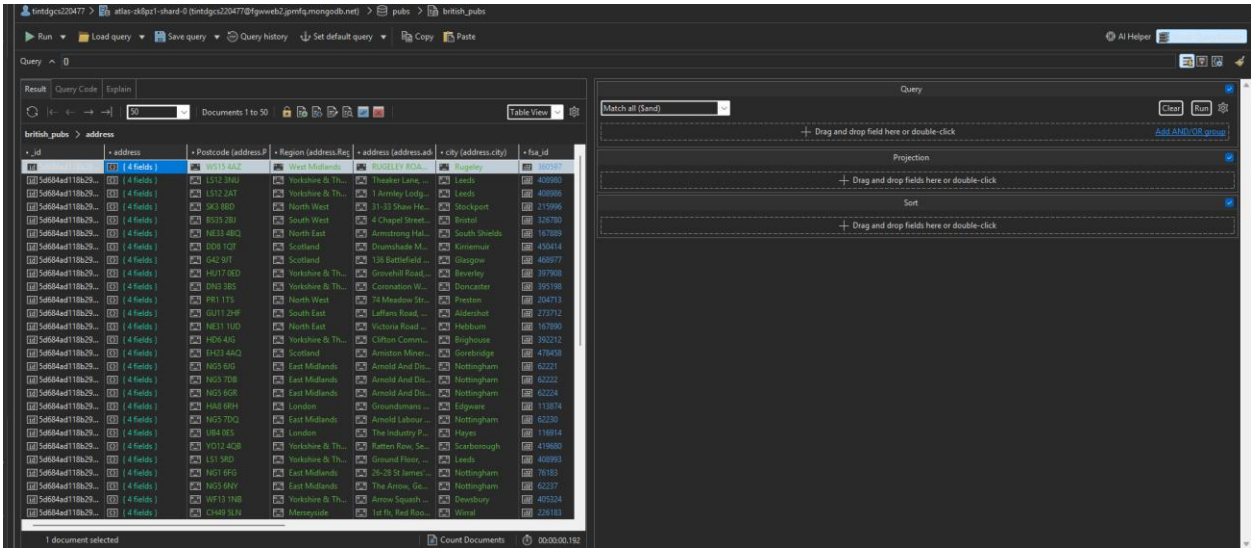
Result > local_authority

| local_authority |
| --- |
| Rhondda Cynon... |
| Carmarthenshire |
| Cardiff |
| Caerphilly |
| Swansea |
| Conwy |
| Neath Port Talbot |
| Bridgend |
| Powys |
| Pembrokeshire |
| Gwynedd |
| Vale of Glamorg... |
| Monmouthshire |
| Newport |
| Blaenau Gwent |

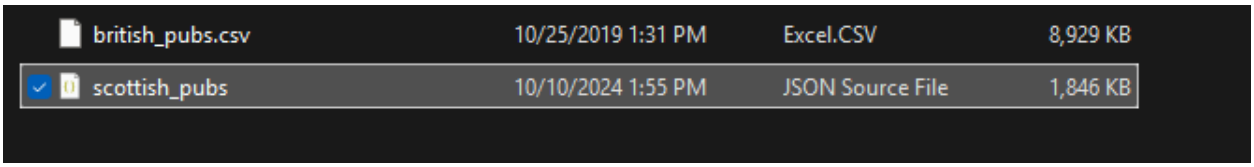
Task 5.2



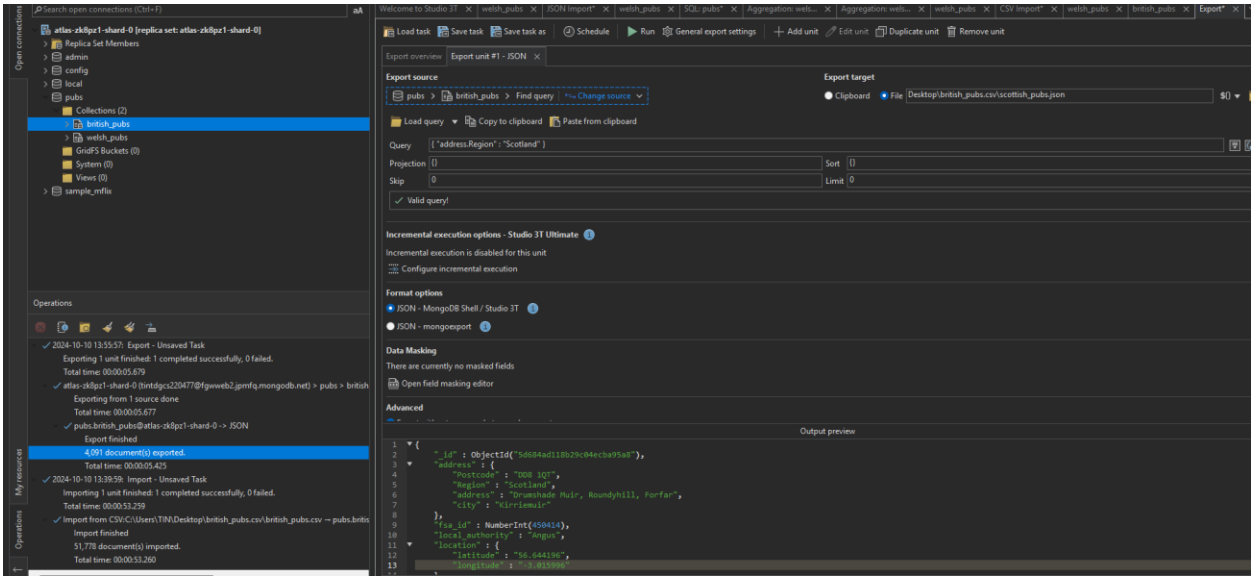

Task 5.3



Task 6.1




Task 6.2



MongoDB is a super-flexible, document-oriented NoSQL database that stores data in JSON-like structures. It organizes data in a hierarchy, starting with databases, then collections, documents, and finally fields within those documents. The _id field is the primary key for every document, and I can even embed documents within documents, treated as Object data types. MongoDB's files are created the first time I add data. It's a powerful tool for handling complex and varied data structures.