DataBase.

Database : is a collection of information/data with an interface.

SQL (relational) VS NoSQL (non-relational).

Relational Database : is made up of a set of tables with data that fits into a predefined category. SQL (Structured Query Language) is the standard user and application program interface for a relational database.

NoSQL database : is effective for big data performance issues that relational database are not built to solve.

MongoDB installation : (NoSQL database)

After running, mongodb server should be closed by ctrl + c.

To repair : cd

./mongod --repair

To open the mongodb shell : mongo

commands : help

show dbs.

use db_name (create or use a existing database)

insert ( ) : insert data

find ( ) : display, i.e : find ({ name : "..." });

update (stm1 , stm2) : stm1 is a selector, stm2 is the information to update.

i.e : update ({ name : "..." }, { prof : value });

find items — update

remove (select_stm) : remove entries.

Mongoose: an elegant mongodb object modeling for node.js.

install: npm install mongoose

then: var mongoose = require("mongoose");
mongoose.connect("mongodb://localhost/db_name");

Then we can define the data schema (pattern) using:

optional

```
var schema = new mongoose.Schema({
    name: String,
    age: Number,
    City: String
});
```

pattern.

Then we can create a new collection/model using schema above:

i.e: var dogs = mongoose.model("name", schema);

① Now we can create a new object using:

```
var dog = new dogs({ ... });
```

To save the new object to database, we use save:

```
dog.save(function(err, dog){
    if(err){
        ...
    }
    else{
        ...
    }
});
```

② Or we can create and save once using create():

i.e:

```
dogs.create(data, function(error, obj){
    ...
});
```