Backend Engineer coding test
Updated: 11/17/2023

Overview

Your task is to create a MongoDB to SQL translator. Please treat the exercise as a real life project deliverable since we will grade you on all aspects. This is your time to shine and get creative so put your best foot forward!

Input/Output examples

```
in: db.user.find({name: 'john'});
out: SELECT * FROM user WHERE name = 'john';

in: db.user.find({_id: 23113},{name: 1, age: 1});
out: SELECT name, age FROM user WHERE _id = 23113;

in: db.user.find({age: {$gte: 21}},{name: 1, _id: 1});
out: SELECT name, _id FROM user WHERE age >= 21;
```

The translator should only support the following mongodb operators:

$or
$and
$lt
$lte
$gt
$gte
$ne
$in

Other considerations

- There can be any combinations of operators in a single query.

- The translator only needs to support db.find. It is OK to return an error for all other types of queries.

- The answer must be developed in Typescript. NPM libraries can be included, except for SQL builders.

- The evaluation criteria are the same as if you were submitting code to be reviewed by your team.

- No need to support complex data types such as Date, ObjectId, etc.