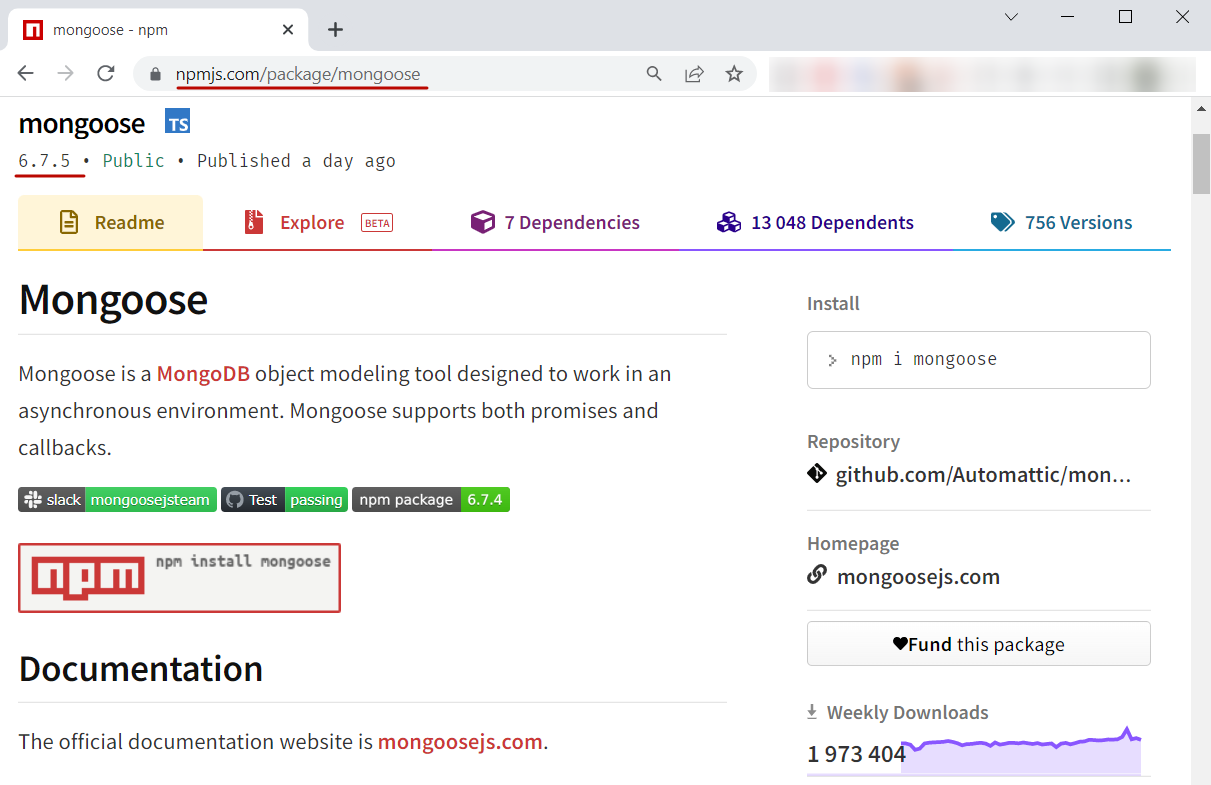
Лекция 12а

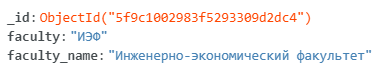
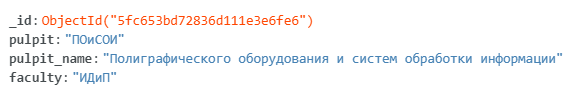
ПСКП, ПОИТ-3

**Node.js: Mongoose**

1. **Mongoose:** ODM-библиотека (Object Document Mapping) для работы с MongoDB.

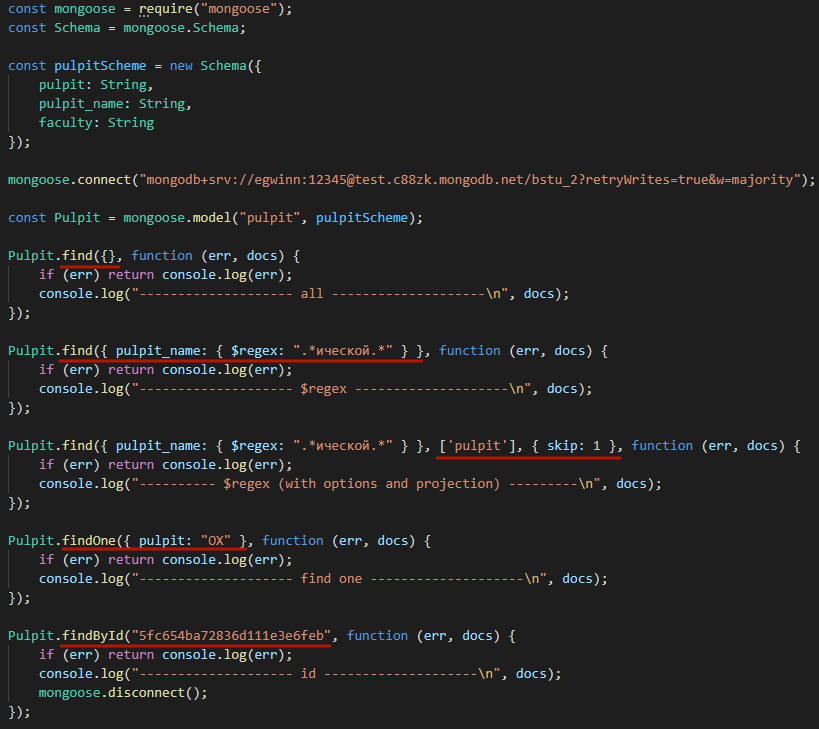


1. **Mongoose:** <https://mongoosejs.com/docs/index.html>
2. **Mongoose:** <https://metanit.com/web/nodejs/6.8.php>
3. **Mongoose:** npm install mongoose
4. **Mongoose:** SchemaTypes: String, Number, Date, Buffer, Boolean, Mixed, ObjectId, Array, Decimal128, Map, Schema
5. **Mongoose:** scheme, model, connect



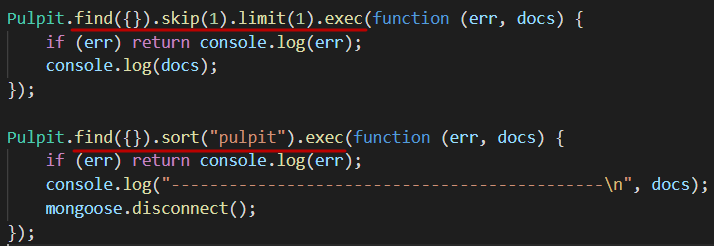


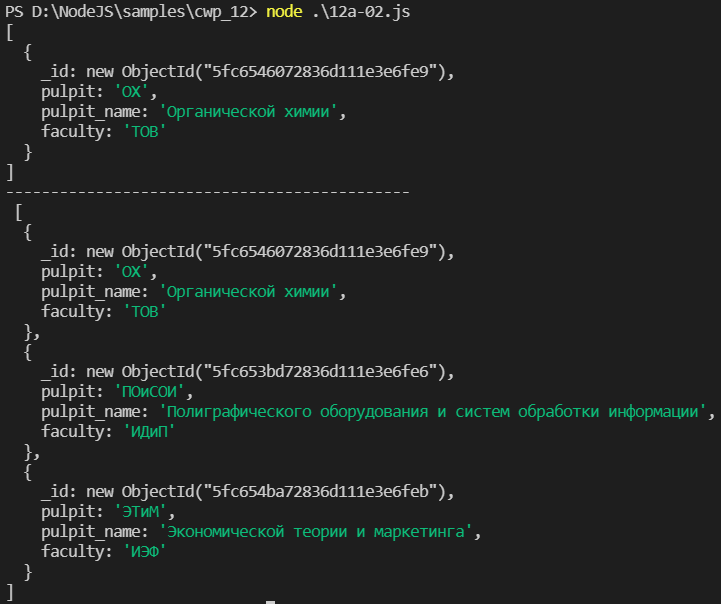
1. **Mongoose:** client, connect, поиск, find, findOne, findById



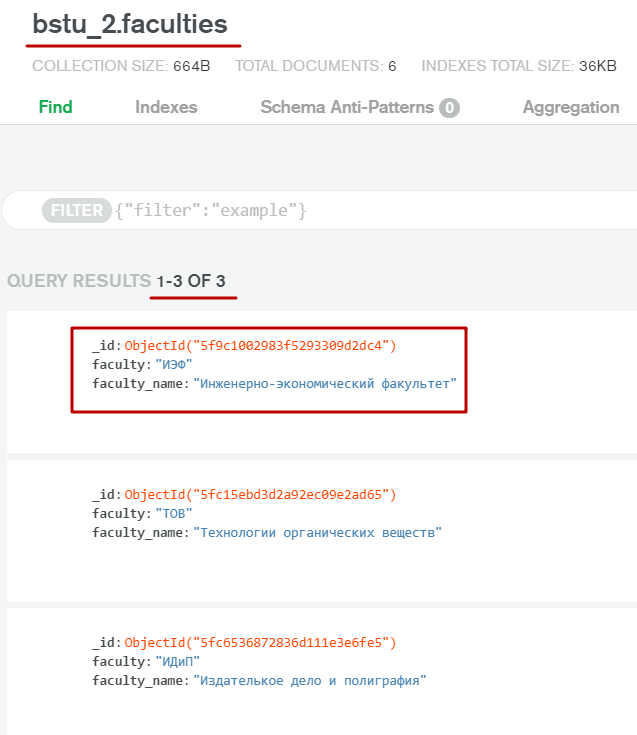
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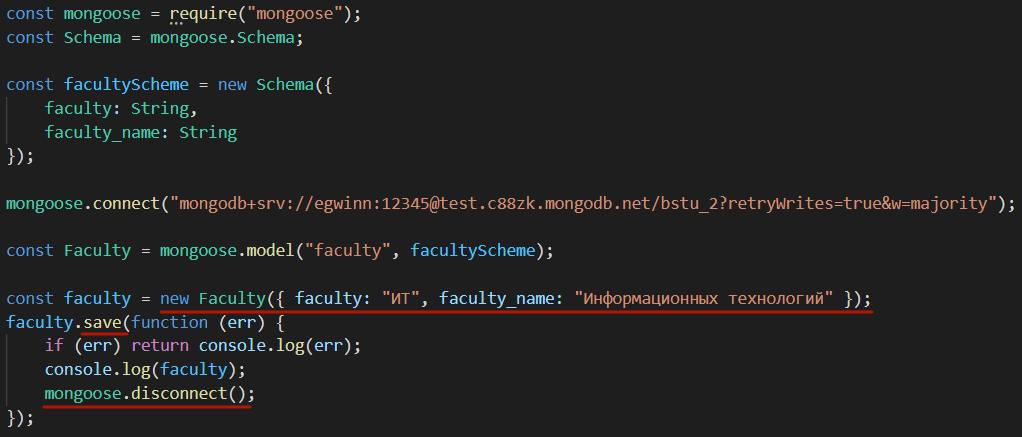
1. **Mongoose:** client, connect, поиск, find, exec

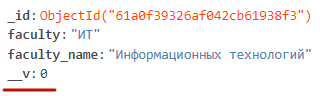
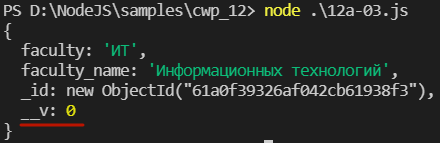




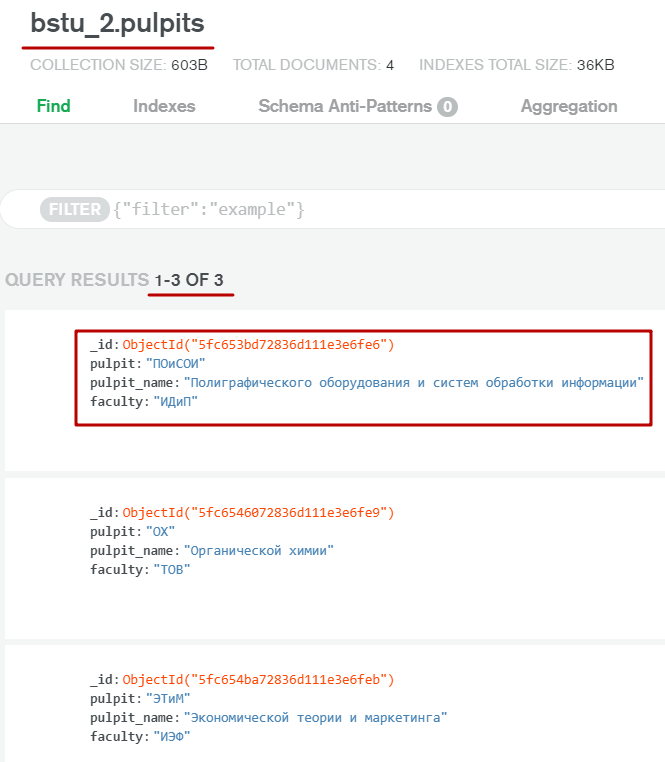
1. **Mongoose:** создание документа,save

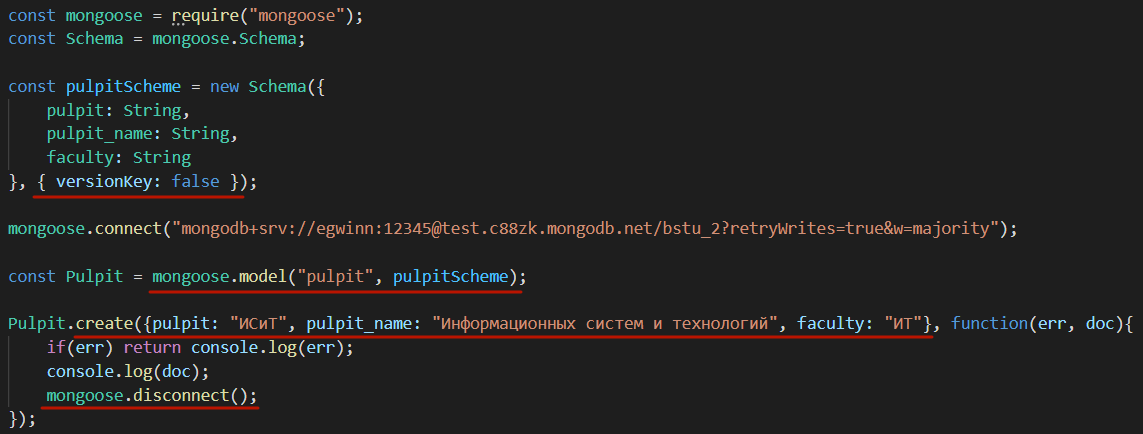


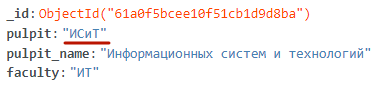
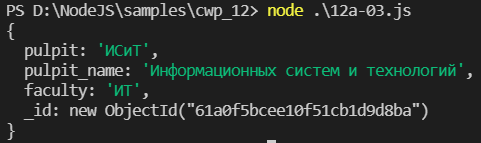




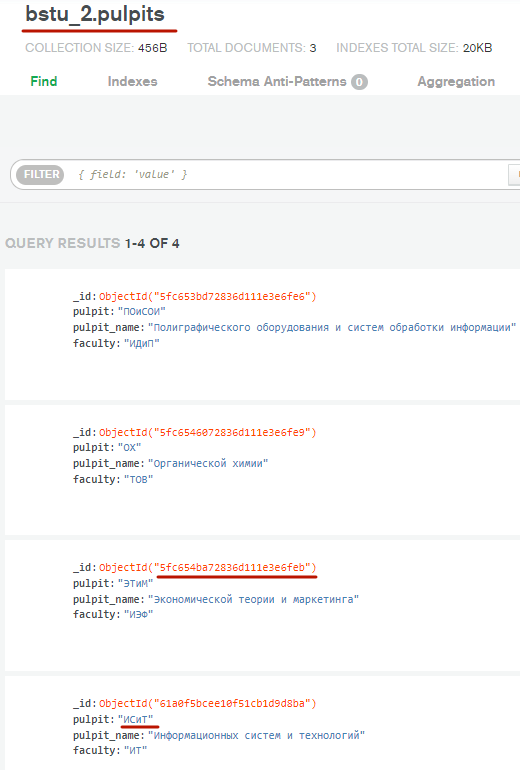
1. **Mongoose:** создание документа,create

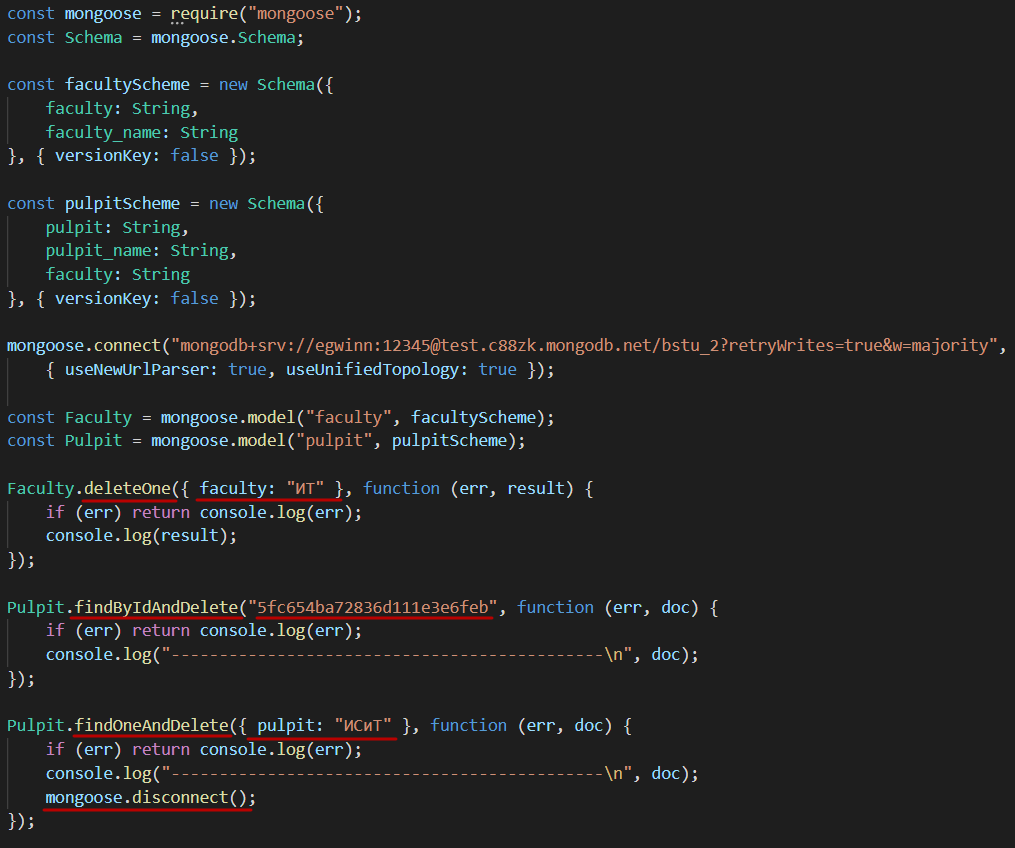


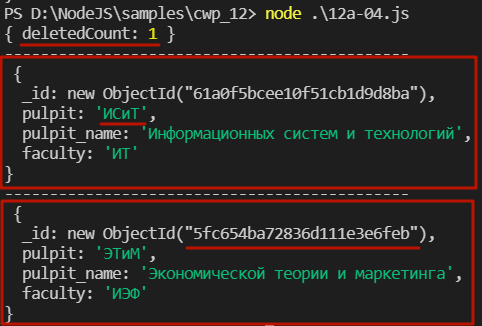




1. **Mongoose:** удаление документа(ов), deleteOne / deleteMany / findByIdAndDelete / findOneAndDelete

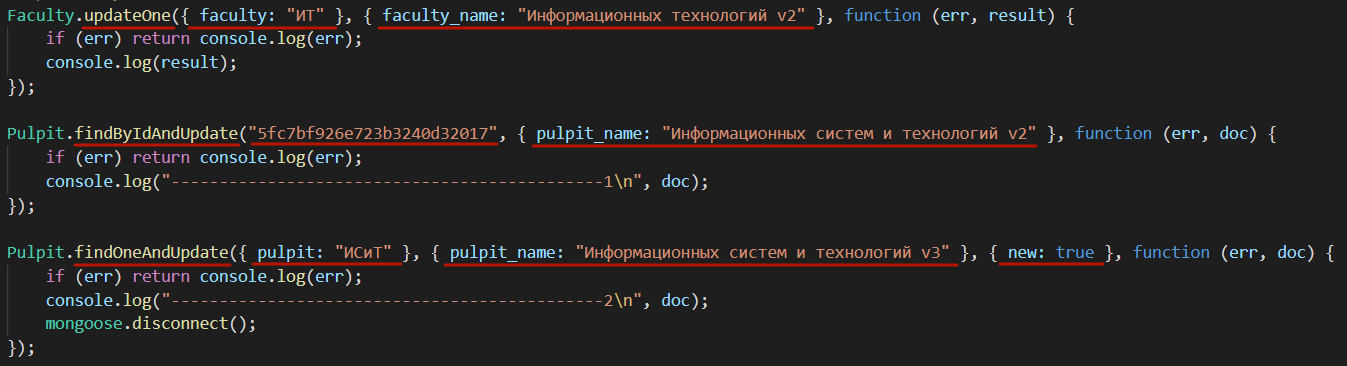


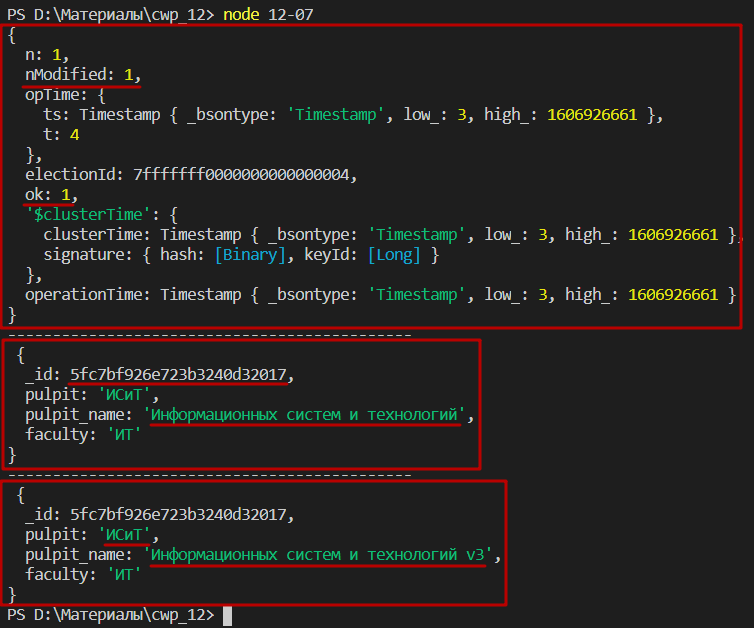
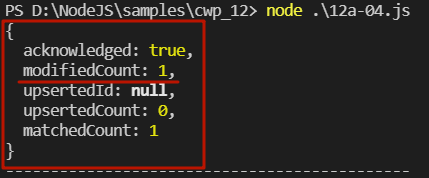


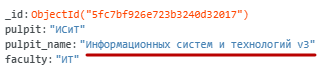
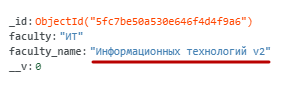


1. **Mongoose:** обновление документа,updateOne / updateMany findByIdAndUpdate / findOneAndUpdate







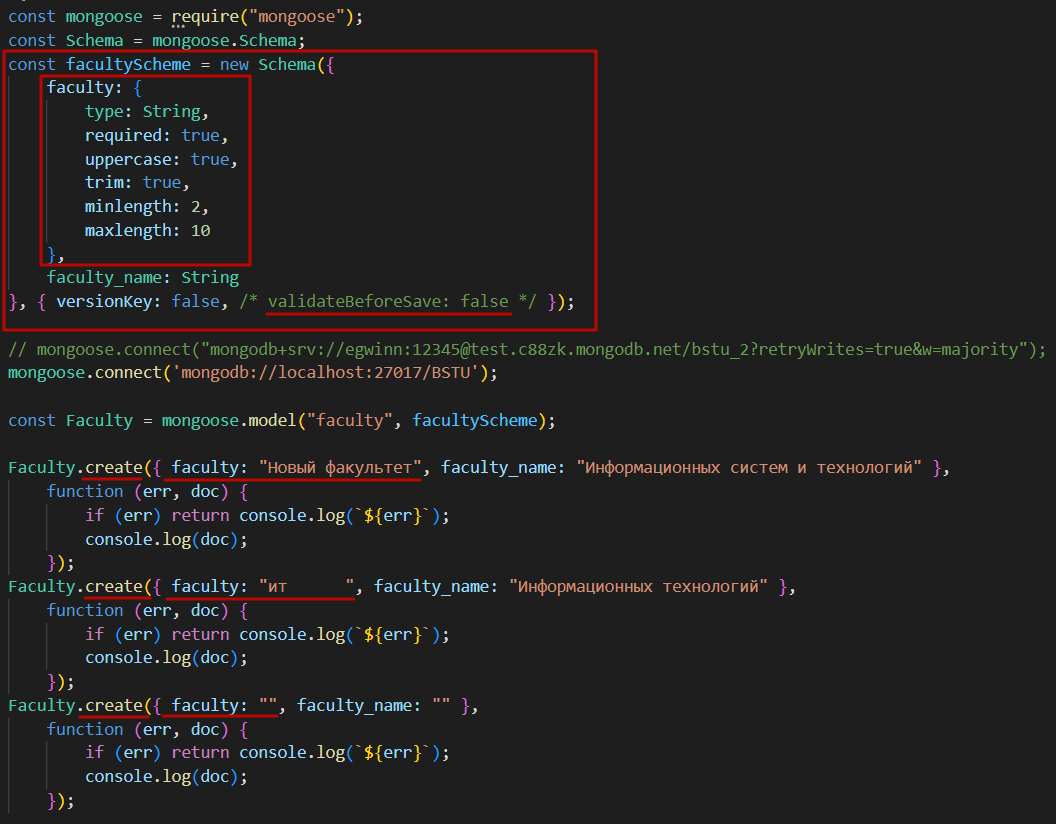


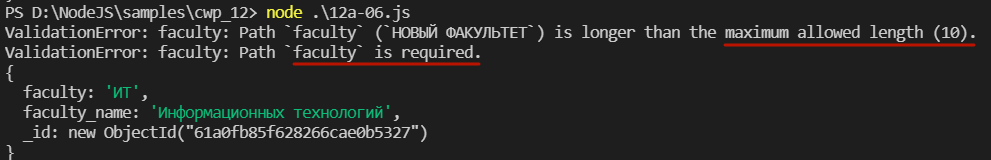
1. **Mongoose:** scheme, ограничения, валидация

<https://mongoosejs.com/docs/schematypes.html>

<https://mongoosejs.com/docs/validation.html>

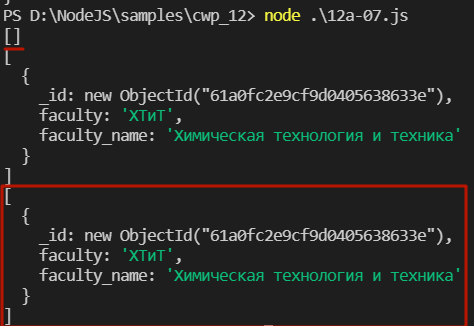




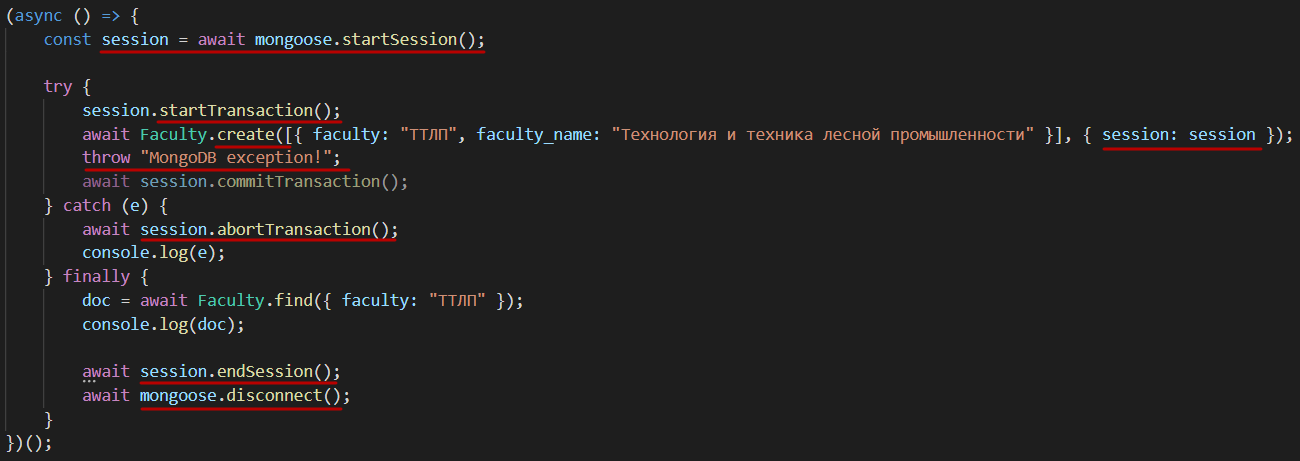


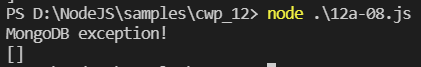
1. **Mongoose:** session, transaction, commit





1. **Mongoose:** session, transaction, abort





1. **Mongoose:** session, withTransaction, auto commit/abort

