Use mvn spring-boot:run -Dspring-boot.run.arguments="Who is head of department Math» to search the head of department

```
2021-12-22 13:22:15.088 INFO 63192 --- [ main] c.e.TestProject.TestProjectApplication main] c.e.TestProject.Controller. Controller in main] c.e.TestProject.Controller in main
```

Use mvn spring-boot:run -Dspring-boot.run.arguments="Show Math statistics" to Show {department\_name} statistics.

```
SEARCH RESULT:

2021-12-22 13:23:38.385 INFO 63278 --- [ main] c.e.TestProject.dao.WorkRepositoryImpl main] c.e.TestProject.dao.WorkRepositoryImpl search department has 2 associate_professor

Math department has 2 professor

Math department has 1 professor
```

Use mvn spring-boot:run -Dspring-boot.run.arguments="Show the average salary for the department Math" to Show the average salary for the department {department\_name}.

```
2021-12-22 13:24:37.721 INFO 63326 --- [ main] c.e.TestProject.TestProjectApplication 2021-12-22 13:24:37.721 INFO 63326 --- [ main] c.e.TestProject.controller.Controller 2021-12-22 13:24:37.86 INFO 63326 --- [ main] c.e.TestProject.dao.WorkRepositoryImpl 2021-12-22 13:24:37.86 INFO 63326 --- [ main] c.e.TestProject.dao.WorkRepositoryImpl 2021-12-22 13:24:37.86 INFO 63326 --- [ main] c.e.TestProject.dao.WorkRepositoryImpl 2021-12-22 13:24:37.872 INFO 63326 --- [ main] c.e.TestProject.TestProject.TestProjectApplication 2021-12-22 13:24:37.872 INFO 63326 --- [ main] c.e.TestProject.TestProject.TestProjectApplication 2021-12-22 13:24:37.876 INFO 63326 --- [ main] c.e.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject.TestProject
```

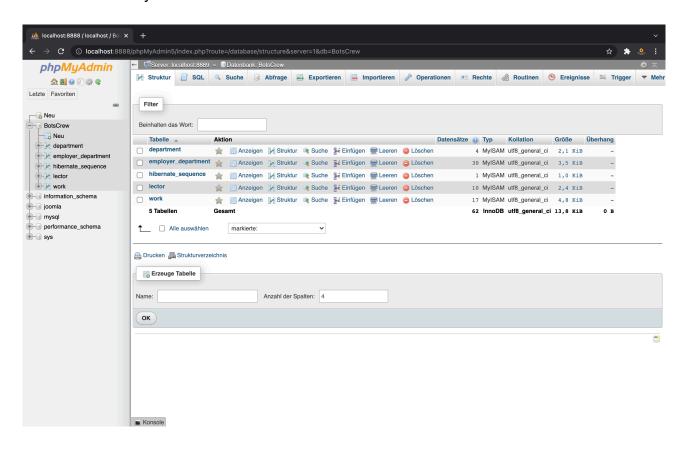
Use mvn spring-boot:run -Dspring-boot.run.arguments="Show count of employee for Math» to Show count of employee for {department\_name}.

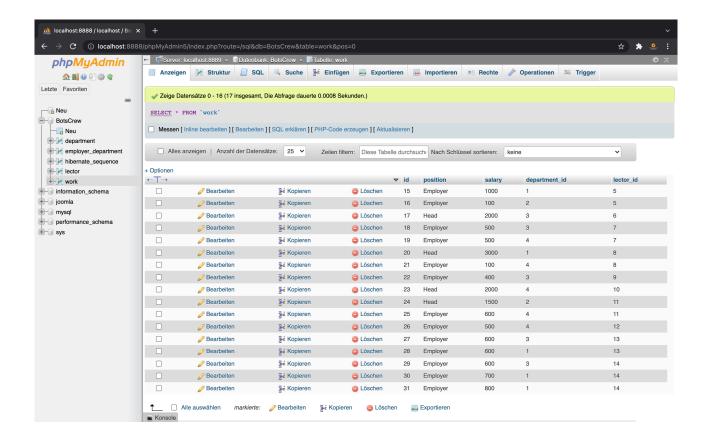
Use mvn spring-boot:run -Dspring-boot.run.arguments="Global search by go» for Global Search.

```
SEARCH RESULT:
2021-12-22 13:26:08.515 INFO 63409 --- [ main] c.e.TestProject.dao.WorkRepositoryImpl : Searching by go keyword
2021-12-22 13:26:08.629 INFO 63409 --- [ main] c.e.TestProject.dao.WorkRepositoryImpl : Search completed
Goga | Gogovich | professor
Igor | Igorov | assistant

2021-12-22 13:26:08.631 INFO 63409 --- [ main] c.e.TestProject.TestProjectApplication : Program was finished successfully
```

Was chosen MySQL database. I used MAMP as a local server.





What I wanted to do, but I had not enough time is :

Improve project Structure.

Use Interfaces instead implementations. (Lectors and Departments for example) with adding design patterns.

Use @Query instead of Custom Repositories.

Improve results format and Output process.

Add Error Handling

Cohesion and coupling improvements are also needed.