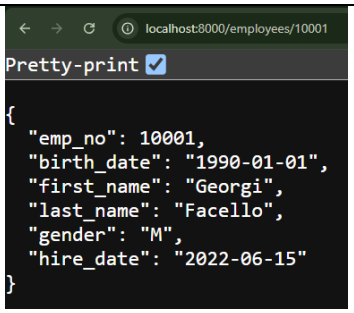
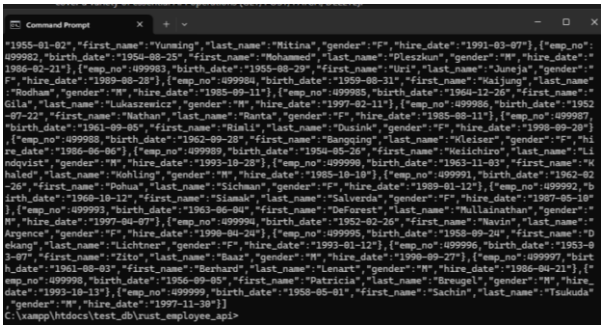
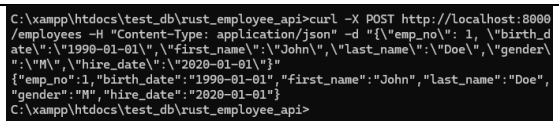
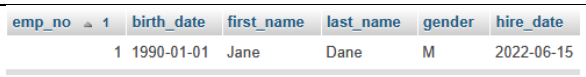
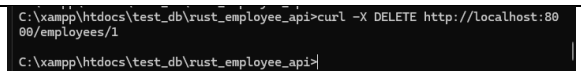
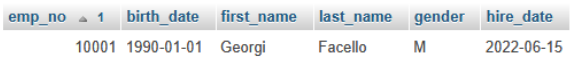
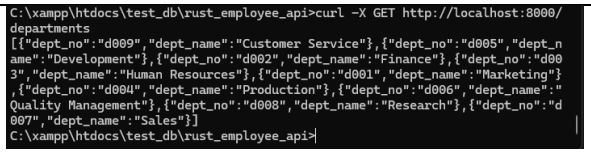
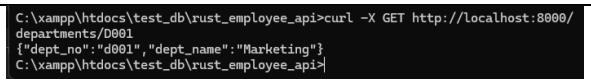
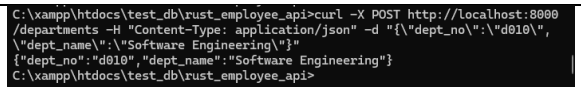
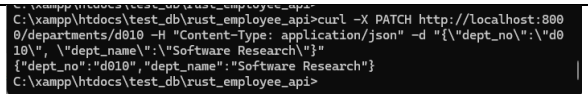
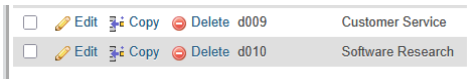
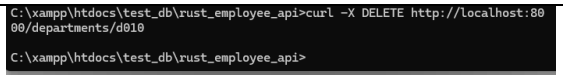
A. Design RUST API with CRUD features to an EMPLOYEE DB (In progress)

<table>
<tr><td colspan="3">Current API progress</td></tr>
<tr><td colspan="2">1. Implemented CRUD functions, results returns as plaintext JSON format</td><td> 

GET results for single employee</td></tr>
<tr><td colspan="3">API CRUL functions testing
- Using CRUL for commands, local XAMPP database.

Using database from: https://github.com/datacharmer/test_db</td></tr>
<tr><td>1. List all employees</td><td>curl -X GET http://localhost:8000/employees</td><td> 
All employees list</td></tr>
<tr><td>2. List single employee</td><td>curl -X GET http://localhost:8000/employees/1</td><td>
Single employee</td></tr>
<tr><td>3. Create single employee</td><td>curl -X POST http://localhost:8000/employees -H "Content-Type: application/json" -d "{\"emp_no\": 1, \"birth_date\":\"1990-01-01\",\"first_name\":\"John\",\"last_name\":\"Doe\",\"gender\":\"M\",\"hire_date\":\"2020-01-01\"}"</td><td> 

Success adding data into database</td></tr>
<tr><td>4. Update single employee</td><td>curl -X PATCH http://localhost:8000/employees/1 -H "Content-Type: application/json" -d "{\"emp_no\":1, \"birth_date\":\"1990-01-01\", \"first_name\":\"Jane\", \"last_name\":\"Dane\",</td><td> </td></tr>
</table>

	\"gender\":\"M\", \"hire_date\":\"2022-06-15\"}"	 Success update data for emp_no: 1
5. Delete single employee	curl -X DELETE http://localhost:8000/employees/1	  Success delete data of emp_no: 1
6. List all departments	curl -X GET http://localhost:8000/departments	 All departments list
7. List single department	curl -X GET http://localhost:8000/departments/D001	 Single department
8. Create department	curl -X POST http://localhost:8000/departments -H "Content-Type: application/json" -d "{\"dept_no\":\"d010\", \"dept_name\":\"Software Engineering\"}"	 Success adding data into database
9. Update single department	curl -X PATCH http://localhost:8000/departments/d010 -H "Content-Type: application/json" -d "{\"dept_no\":\"d010\", \"dept_name\":\"Software Research\"}"	  Success update data for dept_no: d010
10. Delete single department	curl -X DELETE http://localhost:8000/departments/d010	 Success delete data of dept_no: d010

Changes to implement:

1. Implement API limit control, use Bearer token/JWT. Define token limit on database.
2. Implement SODIUM encryption to encrypt results from plaintext to **encrypted** JSON
3. Decryption from PHP layer, should display back the plaintext.