

Luodaan tietokantaan taulut book ja borrower:

```
CREATE TABLE book(  
id_book INT primary key auto_increment,  
name VARCHAR(255),  
author VARCHAR(255),  
isbn VARCHAR(20)  
);
```

```
INSERT INTO book(name,author,isbn) VALUES('PHP Basic','Bob Jones','123-456-789-111-x');
```

```
INSERT INTO book(name,author,isbn) VALUES('Statistics','Lisa Smith','222-333-444-555-y');
```

```
CREATE TABLE borrower(  
fname VARCHAR(45),  
lname VARCHAR(45),  
streetaddress VARCHAR(45),  
id_borrower INT primary key auto_increment  
);
```

```
mysql> describe book;  
+-----+-----+-----+-----+-----+-----+  
| Field | Type          | Null | Key | Default | Extra          |  
+-----+-----+-----+-----+-----+-----+  
| id_book | int          | NO   | PRI | NULL    | auto_increment |  
| name   | varchar(255) | YES  |     | NULL    |                |  
| author | varchar(255) | YES  |     | NULL    |                |  
| isbn   | varchar(20)  | YES  |     | NULL    |                |  
+-----+-----+-----+-----+-----+-----+  
4 rows in set (0.00 sec)  
  
mysql> describe borrower;  
+-----+-----+-----+-----+-----+-----+  
| Field          | Type          | Null | Key | Default | Extra          |  
+-----+-----+-----+-----+-----+-----+  
| fname          | varchar(45)   | YES  |     | NULL    |                |  
| lname          | varchar(45)   | YES  |     | NULL    |                |  
| streetaddress  | varchar(45)   | YES  |     | NULL    |                |  
| id_borrower    | int           | NO   | PRI | NULL    | auto_increment |  
+-----+-----+-----+-----+-----+-----+  
4 rows in set (0.00 sec)
```

Testataan Postmanilla CRUD-operaatit:

Get:

Book taulu:

HTTPlocalhost:3000/book

Save

No Environment

GETlocalhost:3000/book

Send

Params

Authorization

Headers (9)

Body

Pre-request Script

Tests

Settings

Code

Cookies

Query Params

	Key	Value
	Key	Value

Body

Cookies

Headers (7)

Test Results

Status: 200 OK Time: 9 ms Size: 401 B

Pretty

Raw

Preview

JSON

```
1  [
2    {
3      "id_book": 1,
4      "name": "PHP Basic",
5      "author": "Bob Jones",
6      "isbn": "123-456-789-111-x"
7    },
8    {
9      "id_book": 2,
10     "name": "Statistics",
11     "author": "Lisa Smith",
12     "isbn": "222-333-444-555-y"
13   }
14 ]
```

Borrower taulu:

localhost:3000/borrower

GET localhost:3000/borrower

Params Authorization Headers (9) Body Pre-request Script Tests Settings

Query Params

Key	Value
Key	Value

Body Cookies Headers (7) Test Results

Status: 200 OK Time: 25 ms Size: 315 B

Pretty Raw Preview JSON

```
1 {
2   "fname": "Aku",
3   "lname": "Ankka",
4   "streetaddress": "Ankkalinn 1",
5   "id_borrower": 1
6 }
7
8
```

Post:

Book taulu:

localhost:3000/book

POST localhost:3000/book

Params Authorization Headers (9) Body Pre-request Script Tests Settings

☐ none ☐ form-data ☒ x-www-form-urlencoded ☐ raw ☐ binary ☐ GraphQL

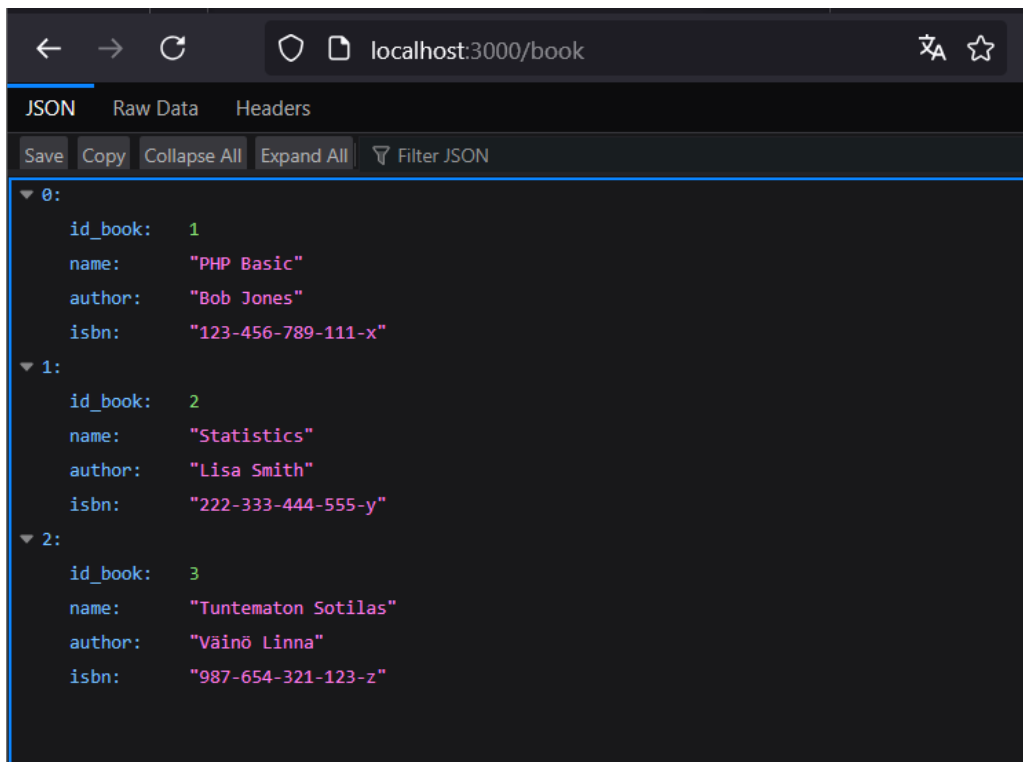
Key	Value
<input checked="" type="checkbox"/> name	Tuntematon Sotilas
<input checked="" type="checkbox"/> author	Väinö Linna
<input checked="" type="checkbox"/> isbn	987-654-321-123-z
Key	Value

Body Cookies Headers (7) Test Results

Status: 200 OK Time: 73 ms Size: 343 B

Pretty Raw Preview JSON

```
1 {
2   "fieldCount": 0,
3   "affectedRows": 1,
4   "insertId": 3,
5   "info": "",
6   "serverStatus": 2,
7   "warningStatus": 0,
8   "changedRows": 0
9 }
```



Borrower taulu:

The screenshot displays a REST client interface for a POST request to `localhost:3000/borrower`. The request body is set to `x-www-form-urlencoded` with the following fields:

Key	Value
fname	Hessu
lname	Hopo
streetaddress	Ankkalinn 2

The response is a JSON array with two objects, each representing a borrowed item. The response status is 200 OK, with a time of 18 ms and a size of 343 B.

```
1 {
2   "fieldCount": 0,
3   "affectedRows": 1,
4   "insertId": 2,
5   "info": "",
6   "serverStatus": 2,
7   "warningStatus": 0,
8   "changedRows": 0
9 }
```

The JSON response is displayed in the bottom panel, showing two objects in the array:

```
0: {
  fname: "Aku"
  lname: "Ankka"
  streetaddress: "Ankkalinn 1"
  id_borrower: 1
}
1: {
  fname: "Hessu"
  lname: "Hopo"
  streetaddress: "Ankkalinn 2"
  id_borrower: 2
}
```

Put:

Book taulu:

PUT localhost:3000/book/3 Send

Params Authorization Headers (9) **Body** Pre-request Script Tests Settings Code Cookies

☐ none ☐ form-data ☒ x-www-form-urlencoded ☐ raw ☐ binary ☐ GraphQL

	Key	Value
<input checked="" type="checkbox"/>	name	1984
<input checked="" type="checkbox"/>	author	George Orwell
<input checked="" type="checkbox"/>	isbn	987-654-321-444-z
	Key	Value

Body Cookies Headers (7) Test Results Status: 200 OK Time: 20 ms Size: 383 B ...

Pretty Raw Preview JSON 🔍

```
1 {
2   "fieldCount": 0,
3   "affectedRows": 1,
4   "insertId": 0,
5   "info": "Rows matched: 1 Changed: 1 Warnings: 0",
6   "serverStatus": 2,
7   "warningStatus": 0,
8   "changedRows": 1
9 }
```

← → ↺ 🛡️ 📄 localhost:3000/book 🔍 ☆ 📄 👤 📄 ☰

JSON Raw Data Headers

Save Copy Collapse All Expand All Filter JSON

```
▼ 0:
  id_book: 1
  name: "PHP Basic"
  author: "Bob Jones"
  isbn: "123-456-789-111-x"
▼ 1:
  id_book: 2
  name: "Statistics"
  author: "Lisa Smith"
  isbn: "222-333-444-555-y"
▼ 2:
  id_book: 3
  name: "1984"
  author: "George Orwell"
  isbn: "987-654-321-444-z"
```

Borrower taulu:

PUT localhost:3000/borrower/2 Send

Params Authorization Headers (9) **Body** Pre-request Script Tests Settings Code Cookies

☐ none ☐ form-data ☒ x-www-form-urlencoded ☐ raw ☐ binary ☐ GraphQL

Key	Value
<input checked="" type="checkbox"/> fname	Hessu
<input checked="" type="checkbox"/> lname	Hopo
<input checked="" type="checkbox"/> streetaddress	Ankkallinna 3
Key	Value

Body Cookies Headers (7) Test Results Status: 200 OK Time: 27 ms Size: 383 B

Pretty Raw Preview JSON ↻

```
1 {
2   "fieldCount": 0,
3   "affectedRows": 1,
4   "insertId": 0,
5   "info": "Rows matched: 1 Changed: 1 Warnings: 0",
6   "serverStatus": 2,
7   "warningStatus": 0,
8   "changedRows": 1
9 }
```

← → ↻ localhost:3000/borrower

JSON Raw Data Headers

Save Copy Collapse All Expand All Filter JSON

```
▼ 0:
  fname:      "Aku"
  lname:      "Ankka"
  streetaddress: "Ankkallinna 1"
  id_borrower: 1
▼ 1:
  fname:      "Hessu"
  lname:      "Hopo"
  streetaddress: "Ankkallinna 3"
  id_borrower: 2
```

Delete:

Book taulu:

localhost:3000/book/3

DELETE localhost:3000/book/3

Send

Params Authorization Headers (9) Body Pre-request Script Tests Settings Code Cookies

Query Params

Key	Value
Key	Value

Body Cookies Headers (7) Test Results

Status: 200 OK Time: 17 ms Size: 343 B

Pretty Raw Preview JSON

```
1 {
2   "fieldCount": 0,
3   "affectedRows": 1,
4   "insertId": 0,
5   "info": "",
6   "serverStatus": 2,
7   "warningStatus": 0,
8   "changedRows": 0
9 }
```

localhost:3000/book

JSON Raw Data Headers

Save Copy Collapse All Expand All Filter JSON

```
0:
  id_book: 1
  name: "PHP Basic"
  author: "Bob Jones"
  isbn: "123-456-789-111-x"
1:
  id_book: 2
  name: "Statistics"
  author: "Lisa Smith"
  isbn: "222-333-444-555-y"
```


Borrower taulu:

The image shows two screenshots related to a REST API request.

Top Screenshot (REST Client):

- URL: `localhost:3000/borrower/2`
- Method: `DELETE`
- Buttons: `Save`, `No Environment`, `Send`
- Tabs: `Params`, `Authorization`, `Headers (9)`, `Body` (selected), `Pre-request Script`, `Tests`, `Settings`
- Query Params: A table with columns `Key` and `Value`, containing one row with `Key` and `Value`.
- Body: A JSON object with the following fields:

```
{  "fieldCount": 0,  "affectedRows": 1,  "insertId": 0,  "info": "",  "serverStatus": 2,  "warningStatus": 0,  "changedRows": 0}
```
- Status: `200 OK`, Time: `20 ms`, Size: `343 B`

Bottom Screenshot (Web Browser):

- Address bar: `localhost:3000/borrower`
- Tab: `JSON`
- Buttons: `Save`, `Copy`, `Collapse All`, `Expand All`, `Filter JSON`
- Content: A JSON object with the following fields:

```
{  "fname": "Aku",  "lname": "Ankka",  "streetaddress": "Ankkalinnä 1",  "id_borrower": 1}
```