

Taulut:

```
mysql> desc 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 (0.01 sec)
```

```
mysql> desc borrower;
```

Field	Type	Null	Key	Default	Extra
id_borrower	int	NO	PRI	NULL	auto_increment
fname	varchar(40)	YES		NULL	
lname	varchar(40)	YES		NULL	
streetAddress	varchar(50)	YES		NULL	

```
4 rows in set (0.01 sec)
```

```
mysql> select * from book;
```

id_book	name	author	isbn
1	PHP Basic	Bob Jones	123-456-789-111-x
2	Statistics	Lisa Smith	222-333-444-555-y
3	The C++ Programming Language	Bjarne Stroustrup	222-777-666-333

```
3 rows in set (0.00 sec)
```

```
mysql> select * from borrower;
```

id_borrower	fname	lname	streetAddress
1	Teemu	Pukki	Korvatunturi
2	Julius	Cesar	Forum
3	Iines	Ankka	Ankkalinna 234
4	Paul	Atreides	Arrakis

```
4 rows in set (0.01 sec)
```

GET:

The screenshot shows a Postman interface with a GET request to `http://localhost:3000/borrower/`. The response is displayed in a JSONpretty tab, showing an array of four borrower objects. Each object has properties: `id_borrower`, `fname`, `lname`, and `streetAddress`.

```
[{"id_borrower": 1, "fname": "Teemu", "lname": "Pukki", "streetAddress": "Korvatunturi"}, {"id_borrower": 2, "fname": "Julius", "lname": "Ceasar", "streetAddress": "Forum"}, {"id_borrower": 3, "fname": "Iines", "lname": "Ankka", "streetAddress": "Ankkalinna 234"}, {"id_borrower": 5, "fname": "Paul", "lname": "Atreides", "streetAddress": null}]
```

DELETE:

The screenshot shows the Postman interface with a DELETE request to `http://localhost:3000/borrower/5`. The 'Body' tab is selected, showing a JSON payload with fields `fname`, `lname`, and `streetaddress` checked. The 'TERMINAL' tab displays the command-line history of the API interactions.

DELETE http://localhost:3000/borrower/5

Params Authorization Headers (9) Body Scripts Settings

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

Key
<input checked="" type="checkbox"/> fname
<input checked="" type="checkbox"/> lname
<input checked="" type="checkbox"/> streetaddress
Key

Body Cookies Headers (7) Test Results

Pretty Raw Preview JSON

```
1 [{"id_borrower": 5, "fname": "Paul", "lname": "Atreides", "streetAddress": "Kings Road 123"}]
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS POSTMAN CONSOLE

```
PS C:\Users\Snutt\OneDrive\Asiakirjat\tietokannat_K2025\Viikko7\book_borrower> GET /borrower/5?fname=&lname=&streetaddress= 200 1.475 ms - 2
DELETE /borrower/5 200 23.172 ms - 107
GET /borrower/5 200 1.446 ms - 2
[
  {
    id_borrower: 1,
    fname: 'Teemu',
    lname: 'Pukki',
    streetAddress: 'Korvatunturi'
  },
  {
    id_borrower: 2,
    fname: 'Julius',
    lname: 'Ceasar',
    streetAddress: 'Forum'
  },
  {
    id_borrower: 3,
    fname: 'Iines',
    lname: 'Ankka',
    streetAddress: 'Ankkalinna 234'
  }
]
GET /borrower/ 200 2.031 ms - 241
```

POST:

POST <http://localhost:3000/borrower/>

Params Authorization Headers (9) Body Scripts Settings

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

Key	Value
<input checked="" type="checkbox"/> fname	Freyd
<input checked="" type="checkbox"/> lname	Rautha
<input checked="" type="checkbox"/> streetaddress	Giedi Prime
Key	Value

Body Cookies Headers (7) Test Results

Pretty Raw Preview JSON

```
1  [{"fieldCount":0,"affectedRows":1,"insertId":6,"info":"","serverStatus":2,"warningCount":0}]
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS POSTMAN CONSOLE

```
PS C:\Users\Snutt\OneDrive\Asiakirjat\tietokannat_K2025\Viikko7\book_borrower> nodemon start
GET /borrower/5?fname=&lname=&streetaddress= 200 1.475 ms - 2
DELETE /borrower/5 200 23.172 ms - 107
GET /borrower/5 200 1.446 ms - 2
[
  {
    id_borrower: 1,
    fname: 'Teemu',
    lname: 'Pukki',
    streetAddress: 'Korvatunturi'
  },
  {
    id_borrower: 2,
    fname: 'Julius',
    lname: 'Ceasar',
    streetAddress: 'Forum'
  },
  {
    id_borrower: 3,
    fname: 'Iines',
    lname: 'Ankka',
    streetAddress: 'Ankkalinna 234'
  }
]
GET /borrower/ 200 2.031 ms - 241
POST /borrower/ 200 12.176 ms - 107
```

PUT:

PUT | http://localhost:3000/borrower/6

Params Authorization Headers (9) Body Scripts Settings

none form-data x-www-form-urlencoded raw binary

Key
<input checked="" type="checkbox"/> fname
<input checked="" type="checkbox"/> lname
<input checked="" type="checkbox"/> streetaddress
Key

Body Cookies Headers (7) Test Results

Pretty Raw | Preview JSON ↻

```
1 {"fieldCount":0,"affectedRows":1,"insertId":6,"info": "ok"}
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL PORTS POSTMAN

```
PS C:\Users\Snutt\OneDrive\Asiakirjat\tietokannat_K2025\Viikko7> curl -XPUT -d "fname=Freyd&lname=Rautha&streetAddress=null" http://localhost:3000/borrower/6
{
  "id_borrower": 6,
  "fname": "Freyd",
  "lname": "Rautha",
  "streetAddress": null
}
[{"id_borrower": 1, "fname": "Teemu", "lname": "Pukki", "streetAddress": "Korvatunturi"}, {"id_borrower": 2, "fname": "Julius", "lname": "Ceasar", "streetAddress": "Forum"}, {"id_borrower": 3, "fname": "Iines", "lname": "Ankka", "streetAddress": "Ankkalinna 234"}, {"id_borrower": 6, "fname": "Vladimir", "lname": "Harkonen", "streetAddress": null}]
```