

### 3-1

kadai3-1 の 3-1.md に解答した

### 3-2

kadai3-2 の sql\_injection.md に解答した

### 3-3

テーブル作成

```
zova0@focal-fossa:~/unt/jikken/web/part2/02190367/kadai3-3$ sqlite3 sandbox.db
SQLite version 3.31.1 2020-01-27 19:55:54
Enter ".help" for usage hints.
sqlite> create database labs(id integer primary key, lab_name char);
Error: near "database": syntax error
sqlite> create table labs(id integer primary key, lab_name char);
sqlite> create table lab_members(id integer primary key, lab_id integer, member_name char, position char);
```

CSV データをそれぞれのテーブルに流し込む

データ量が多く見切れてしまった

```
sqlite> .import lab_members.csv lab_members
```

```
sqlite> .import labs.csv labs
sqlite> select * from labs
...> ;
1,"Mathematical Science"
2,"Advanced Electronics"
3,Bioengineering
4,hci-lab
5,"System Creation"
6,"High Performance Computing"
7,Algorithm
```

```
106,7,Kami_Daigre,B3
107,7,Joseette_Almanzar,B3
108,7,Johna_Pendergast,B4
109,7,Irma_Miyamoto,B4
110,7,Santa_Honaker,B4
111,7,Kassandra_Gillan,D1
112,7,Trinh_Maillet,D1
113,7,Chauncey_Stough,D1
114,7,Judi_Leggett,D1
115,7,Fernando_Harada,D1
116,7,Marion_Koran,D2
117,7,Audria_Canela,D2
118,7,Jarrold_Derose,D2
119,7,Len_Domino,D3
120,7,Clifton_Parfait,D3
121,7,Chasity_West,D3
122,7,Mika_Rosenbaum,M2
123,7,Saran_Thurston,M2
124,7,Kyla_Shaddix,M2
```

3-4

lab\_search.rb の出力結果

```
zova0@focal-fossa:~/uni/jikken/web/part2/02190367/kadai3-4$ vim .  
hci-lab  
Ana_Forth  
Greg_Woo  
Dannette_Audia  
Sherika_Sidle  
Nichelle_Koser  
Chia_Papageorge  
Scot_Declue  
Mitsue_Harmon  
Kam_Crosby  
Hallie_Heinz  
Rose_Satcher  
Milissa_Kuta  
Lucile_Chung  
Yanira_Lollar  
Lavon_Delaney  
Kristal_Don  
Masahiro Kitagawa  
Sho Mitarai  
Tetsuo Ono  
Daisuke Sakamoto
```

member\_search.rb の出力結果

```
Press ENTER or type command to continue
Daisuke Sakamoto
Ana_Forth
Greg_Woo
Dannette_Audia
Sherika_Sidle
Nichelle_Koser
Chia_Papageorge
Scot_Declue
Mitsue_Harmon
Kam_Crosby
Hallie_Heinz
Rose_Satcher
Milissa_Kuta
Lucile_Chung
Yanira_Lollar
Lavon_Delaney
Kristal_Don
Masahiro Kitagawa
Sho Mitarai
Tetsuo Ono
Press ENTER or type command to continue
```

ouyou3-1

ソースコード

```
#coding: utf-8
require 'webrick'
require 'sqlite3'

srv=WEBrick::HTTPServer.new({:DocumentRoot => './',
                             :BindAddress => '127.0.0.1',
                             :Port => 2000})
srv.mount_proc('/lab_search') do |req, res|
  db=SQLite3::Database.new("sandbox.db")
  member_names={}
  lab_name=req.query['lab_name']
  db.execute("SELECT id FROM labs WHERE lab_name = ?", [lab_name]) do |lab_id|
    member_names = db.execute("SELECT member_name
                              FROM lab_members
                              WHERE lab_id = ?", [lab_id])

  end
  res.body+="<meta charset='utf-8'><body>"
  for name in member_names
    res.body+="

>#{name}</p>"
  end
  res.body+="<</body></html>"
  db.close
  res.status=200
  res['Content-Type']='text/html'
end

srv.mount_proc('/member_search') do |req, res|
  db=SQLite3::Database.new("sandbox.db")
  name=req.query['member_name']
  lab_id=0
  lab_mates={}
  db.execute("SELECT lab_id
              FROM lab_members
              WHERE member_name = ?", [name]) do |lab_id|
    lab_mates = db.execute("SELECT member_name
                          FROM lab_members
                          WHERE lab_id = ?
                          AND member_name != ?", [lab_id], [name])

  end
  res.body+="<meta charset='utf-8'><body>"
  for name in lab_mates
    res.body+="

>#{name}</p>"
  end
  res.body+="<</body></html>"
  db.close
  res.status=200
  res['Content-Type']='text/html'
end


```

実行するも、HTML に想定していた出力がされなかった