

1. MySQLでランチオーダーシステムのDB作成

1.1 作成するテーブルの構造

ランチオーダーシステムのERDを示します。

ランチ注文表(lunchorder)

注文ID orderid	注文日付 orderdate	社員ID empid	ランチID lunchid
-----------------	-------------------	---------------	------------------

ランチ表(lunchtbl)

ランチID lunchid	ランチ名 lunchname	価格 unitprice	有無 validflag
------------------	-------------------	-----------------	-----------------

社員表(emptbl)

社員ID empid	氏名 empname	パスワード password
---------------	---------------	-------------------

1.2 テーブルの作成

192.168.56.xxxのサーバにguestユーザで接続後 sudo -s でrootに変更後以下によりテーブルを作成します。

```
guest@aso:~$ sudo -s
[sudo] password for guest:
root@aso:/home/guest#
root@aso:/home/guest# mysql -u testuser -p
Enter password:P@ssP@ss456 ← ここは一般ユーザパスワード
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 8
Server version: 8.0.32 MySQL Community Server - GPL
```

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Type 'help;' or 'ÿh' for help. Type 'ÿc' to clear the current input statement.

```
mysql> use testdb;
Database changed
mysql> show tables;
+-----+
| Tables_in_testdb |
+-----+
| testtbl          | ← 確認時に造ったテーブルが1コあります
+-----+
1 row in set (0.00 sec)
mysql>
mysql> create table emptbl ← emptbl作成
      -> (
      -> empid varchar(10) not null primary key,
      -> empname varchar(30) not null,
      -> password varchar(10)
      -> );
Query OK, 0 rows affected (0.05 sec)
```

```
mysql>
mysql> create table lunchtbl ← lunchtbl作成
      -> (
      -> lunchid serial not null primary key,
      -> lunchname varchar(40) not null,
      -> unitprice int4 not null,
      -> validflag bool default true not null
      -> );
Query OK, 0 rows affected (0.06 sec)
```

```
mysql>
mysql> create table lunchorder ← lunchorder作成
      -> (
      -> orderid serial not null primary key,
      -> orderdate date,
      -> empid int4,
      -> lunchid int4
      -> );
Query OK, 0 rows affected (0.06 sec)
```

```
mysql>
mysql> show tables; ← 新たに3テーブル作成されたか確認
+-----+
| Tables_in_testdb |
+-----+
| emptbl      |
| lunchorder   |
| lunchtbl     |
| testtbl      |
+-----+
4 rows in set (0.00 sec)
```

mysql> ↓emptblデータ投入

```
mysql> insert into emptbl
values('1','watanabe','watanabe');
Query OK, 1 row affected (0.05 sec)
```

```
mysql> insert into emptbl values('2','kodama','kodama');
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into emptbl values('3','tanimoto','tanimoto');
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into emptbl values('4','ohuchi','ohuchi');
Query OK, 1 row affected (0.01 sec)
```

mysql> ↓lunchtblデータ投入

```
mysql> insert into lunchtbl values(1,'日の丸弁当',300,1);
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into lunchtbl values(2,'おにぎり弁当',350,1);
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into lunchtbl values(3,'たこやき弁当',400,1);
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into lunchtbl values(4,'ラーメン弁当',500,1);
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into lunchtbl values(5,'三色弁当',800,1);
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into lunchtbl values(6,'幕ノ内弁当',1500,1);
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into lunchtbl values(7,'しゃぶしゃぶ弁
当',1500,1);
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into lunchtbl values(8,'特製活き造り弁
当',2000,1);
Query OK, 1 row affected (0.01 sec)
```

```
mysql> ↓lunchorderデータ投入
mysql> insert into lunchorder values(1,'2023-4-1',3,5);
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into lunchorder values(2,'2023-4-1',2,6);
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into lunchorder values(3,'2023-4-1',1,6);
Query OK, 1 row affected (0.01 sec)
```

```
mysql>
mysql> select * from emptbl; ← テーブル内容確認
+-----+-----+-----+
| empid | empname | password |
+-----+-----+-----+
| 1     | watanabe | watanabe |
| 2     | kodama   | kodama   |
| 3     | tanimoto | tanimoto |
| 4     | ohuchi   | ohuchi   |
+-----+-----+-----+
4 rows in set (0.00 sec)
```

```
mysql> select * from lunchorder; ← テーブル内容確認
+-----+-----+-----+-----+
| orderid | orderdate | empid | lunchid |
+-----+-----+-----+-----+
|      1 | 2023-04-01 |    3 |      5 |
|      2 | 2023-04-01 |    2 |      6 |
|      3 | 2023-04-01 |    1 |      6 |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```

mysql> select * from lunchtbl; ← テーブル内容確認
+-----+-----+-----+
| lunchid | lunchname          | unitprice | validflag |
+-----+-----+-----+
| 1 | 日の丸弁当           | 300 | 1 |
| 2 | おにぎり弁当           | 350 | 1 |
| 3 | たこやき弁当           | 400 | 1 |
| 4 | ラーメン弁当           | 500 | 1 |
| 5 | 三色弁当             | 800 | 1 |
| 6 | 幕ノ内弁当             | 1500 | 1 |
| 7 | しゃぶしゃぶ弁当       | 1500 | 1 |
| 8 | 特製活き造り弁当       | 2000 | 1 |
+-----+-----+-----+
8 rows in set (0.00 sec)

```

```

mysql>
mysql> quit
Bye
root@aso:/home/guest#

```

1.3 スキーマの確認

テーブルのフィールド情報などスキーマの内容を確認します。

```

root@aso:/home/guest# mysql -u testuser -p
Enter password:
Welcome to the MySQL monitor. Commands end with ; or \g.
Your MySQL connection id is 11
Server version: 8.0.36-Ubuntu0.22.04.1 (Ubuntu)

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Type 'help;' or '\h' for help. Type '\c' to clear the current input
statement.

```

```

mysql> select TABLE_NAME,COLUMN_NAME,COLUMN_TYPE
from INFORMATION_SCHEMA.COLUMNS WHERE

```

TABLE SCHEMA = 'testdb';

TABLE_NAME	COLUMN_NAME	COLUMN_TYPE
emptbl	empid	varchar(10)
emptbl	empname	varchar(30)
emptbl	password	varchar(10)
lunchorder	empid	int
lunchorder	lunchid	int
lunchorder	orderdate	date
lunchorder	orderid	bigint unsigned
lunchtbl	lunchid	bigint unsigned
lunchtbl	lunchname	varchar(40)
lunchtbl	unitprice	int
lunchtbl	validflag	tinyint(1)
testtbl	id	int
testtbl	name	varchar(20)

13 rows in set (0.00 sec)

mysql> **quit**

Bye

root@aso:/home/guest#