

# Primary Key と Foreign Keyの宣言

## 各テーブル(department,station,user(※))の作成

```
MariaDB [Challenge_db]> create table department(
-> departmentID int primary key,
-> departmentName varchar(255));
Query OK, 0 rows affected (0.08 sec)

MariaDB [Challenge_db]> create table station(
-> stationID int primary key,
-> stationName varchar(255));
Query OK, 0 rows affected (0.05 sec)

MariaDB [Challenge_db]> create table user(
-> userID int,
-> name varchar(255),
-> age int,
-> birthday date,
-> departmentID int,
-> stationID int,
-> foreign key(departmentID) references department(departmentID),
-> foreign key(stationID) references station(stationID));
Query OK, 0 rows affected (0.06 sec)
```

※userテーブルにtell カラムを忘れていたので alter tableで追加しました

```
MariaDB [Challenge_db]> alter table user add tell varchar(255) after name;
Query OK, 0 rows affected (0.20 sec)
Records: 0 Duplicates: 0 Warnings: 0

MariaDB [Challenge_db]> show cols from user;
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to your MariaDB server version for the right syntax to use near 'cols from user' at line 1
MariaDB [Challenge_db]> show columns from user;
+-----+-----+-----+-----+-----+-----+
| Field      | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| userID     | int(11)       | YES  |     | NULL    |       |
| name       | varchar(255)  | YES  |     | NULL    |       |
| tell       | varchar(255)  | YES  |     | NULL    |       |
| age        | int(11)       | YES  |     | NULL    |       |
| birthday   | date          | YES  |     | NULL    |       |
| departmentID | int(11)      | YES  | MUL | NULL    |       |
| stationID  | int(11)       | YES  | MUL | NULL    |       |
+-----+-----+-----+-----+-----+-----+
7 rows in set (0.63 sec)
```

```
MariaDB [Challenge_db]> select* from department;
```

departmentID	departmentName
1	開発部
2	営業部
3	総務部

3 rows in set (0.00 sec)

```
MariaDB [Challenge_db]> select* from station;
```

stationID	stationName
1	九段下
2	永田町
3	渋谷
4	神保町
5	上井草

5 rows in set (0.02 sec)

```
MariaDB [Challenge_db]> select* from user;
```

userID	name	tell	age	birthday	departmentID	stationID
1	田中実	012-345-6789	30	1994-02-01	3	
2	鈴木茂	090-11122-3344	37	1987-08-12	3	
3	鈴木実	080-5566-7788	24	2000-12-24	2	
4	佐藤清	012-0987-6543	19	2005-08-01	1	
5	高橋清	090-9900-1234	24	2000-12-24	3	

5 rows in set (0.00 sec)

```
MariaDB [Challenge_db]> █
```