

# ■ Primary Key と Foreign Keyの宣言

## 入力した部分

```
MariaDB [challenge_db]> create table department(  
-> departmentID int not null,departmentName varchar(255),  
-> index(departmentID),  
-> primary key(departmentID)  
-> )ENGINE=InnoDB;  
Query OK, 0 rows affected (0.06 sec)
```

```
MariaDB [challenge_db]> insert into department values(1,'開発部'),  
-> (2,'営業部'),(3,'総務部');  
Query OK, 3 rows affected (0.01 sec)  
Records: 3 Duplicates: 0 Warnings: 0
```

```
MariaDB [challenge_db]> create table station(  
-> stationID int not null,stationName varchar(255),  
-> index(stationID),  
-> primary key(stationID)  
-> )ENGINE=InnoDB;  
Query OK, 0 rows affected (0.05 sec)
```

```
MariaDB [challenge_db]> insert into station values(1,'九段下'),  
-> (2,'永田町'),(3,'渋谷'),(4,'神保町'),(5,'上井草');  
Query OK, 5 rows affected (0.00 sec)  
Records: 5 Duplicates: 0 Warnings: 0
```

```
MariaDB [challenge_db]> create table user(userID int not null,  
-> name varchar(255),tell varchar(255),age int,birthday date,departmentID int,stationID int,  
-> index(departmentID),index(stationID),  
-> primary key(userID),  
-> foreign key(departmentID) references department(departmentID),  
-> foreign key(stationID) references station(stationID)  
-> )ENGINE=InnoDB;  
Query OK, 0 rows affected (0.05 sec)
```

```
MariaDB [challenge_db]> insert into user values(1,'田中 実','012-345-6789',30,'1994-02-01',3,1),  
-> (2,'鈴木 茂','090-1122-3344',37,'1897-08-12',3,4),  
-> (3,'鈴木 実','080-5566-7788',24,'2000-12-24',2,5),  
-> (4,'佐藤 清','012-0987-6543',19,'2005-08-01',1,5),  
-> (5,'高橋 清','090-9900-1234',24,'2000-12-24',3,5);  
Query OK, 5 rows affected (0.01 sec)  
Records: 5 Duplicates: 0 Warnings: 0
```

# 結果

```
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	1
2	鈴木 茂	090-1122-3344	37	1897-08-12	3	4
3	鈴木 実	080-5566-7788	24	2000-12-24	2	5
4	佐藤 清	012-0987-6543	19	2005-08-01	1	5
5	高橋 清	090-9900-1234	24	2000-12-24	3	5

5 rows in set (0.00 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 (0.00 sec)

```
MariaDB [challenge_db]> desc user;
```

Field	Type	Null	Key	Default	Extra
userID	int(11)	NO	PRI	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 (0.03 sec)

```
MariaDB [challenge_db]> desc department;
```

Field	Type	Null	Key	Default	Extra
departmentID	int(11)	NO	PRI	NULL	
departmentName	varchar(255)	YES		NULL	

2 rows in set (0.03 sec)

```
MariaDB [challenge_db]> desc station;
```

Field	Type	Null	Key	Default	Extra
stationID	int(11)	NO	PRI	NULL	
stationName	varchar(255)	YES		NULL	

2 rows in set (0.01 sec)