

6-9 Primary Key と Foreign Keyの宣言

---userテーブルの作成---

```
CREATE TABLE user (  
  -> userID int NOT NULL AUTO_INCREMENT,  
  -> name VARCHAR(255) NOT NULL,  
  -> tell VARCHAR(255) NOT NULL,  
  -> age int NOT NULL,  
  -> birthday date NOT NULL,  
  -> departmentID int NOT NULL,  
  -> stationID int NOT NULL,  
  -> FOREIGN KEY(departmentID) references deptment(departmentID)  
  -> FOREIGN KEY(stationID) references station(stationID)  
  -> ) engine=InnoDB;
```

```
INSERT INTO user (name, tell, age, birthday, departmentID, stationID )  
  -> VALUE('田中 実', '012-345-6789', 30, '1994-02-01',3, 1 ), ('鈴木 茂', '090-1122-3344', 37  
'1987-08-12', 3 ,4 ), ('鈴木 実', '080-5566-7788', 24, '2000-12-24', 2, 5), ('佐藤 清', '012-0987-6543',  
19, '2005-08-01', 1, 5), ('高橋 清', '090-9900-1234', 24, '2000-12-24', 3, 5);
```

---departmentテーブルの作成---

```
CREATE TABLE department (  
  -> departmentID int NOT NULL AUTO_INCREMENT,  
  -> departmentName VARCHAR(255) NOT NULL,  
  -> PRIMARY KEY(departmentID)  
  -> ) engine=InnoDB;
```

```
INSERT INTO department (departmentID, departmentName )  
  -> VALUE(1, '開発部'), (2, '営業部'), (3, '総務部');
```

---stationテーブルの作成---

```
create TABLE station (  
  -> stationID int NOT NULL AUTO_INCREMENT,  
  -> stationName VARCHAR(255) NOT NULL,  
  -> PRIMARY KEY(stationID)  
  -> ) ENGINE=InnoDB;
```

```
INSERT INTO station (stationName)  
  -> VALUE('九段下'), ('永田町'), ('渋谷'), ('神保町'), ('上井草');
```

---内部結合で3つのテーブルの呼び出し---

```
select * from user inner join department on  
user.departmentID = department.departmentID  
-> inner join station on user.stationID =  
station.stationID;
```

```
MariaDB [challenge_db]> select * from user inner join department on user.departmentID = department.departmentID  
-> inner join station on user.stationID = station.stationID;
```

userID	name	tell	age	birthday	departmentID	stationID	departmentID	departmentName	stationID	stationName
1	田中 実	012-345-6789	30	1994-02-01	3	1	3	総務部	1	九段下
2	鈴木 茂	090-1122-3344	37	1987-08-12	3	4	3	総務部	4	神保町
3	鈴木 実	080-5566-7788	24	2000-12-24	2	5	2	営業部	5	上井草
4	佐藤 清	012-0987-6543	19	2005-08-01	1	5	1	開発部	5	上井草
5	高橋 清	090-9900-1234	24	2000-12-24	3	5	3	総務部	5	上井草

5 rows in set (0.00 sec)