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.
  -> PRIMARY KEY(stationID),
  -> FOREIGN KEY(departmentID) REFERENCES department(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');
```

---自然結合で3つのテーブルを結合して呼び出し---SELECT user.userID, user.name, user.tell, user.age, user.birthday, department.departmentName, station.stationName FROM user, department, station WHERE

user.departmentID = department.departmentID AND user.stationID = station.stationID;

| MariaDB [challenge_db]> SELECT user.userID, user.name, user.tell, user.age, user.birthday, depart ment.departmentName, station.stationName FROM user, department, station WHERE user.departmentID = _department.departmentID AND user.stationID = station.stationID; | | | | | | | | | |
|--|--|----------------------------|--|-------------------------------------|--------------------------------------|--|--|--|--|
| userID name | tell | age | birthday | departmentName | stationName | | | | |
| 1 田中 実 1 田中 表 2 節木 実 3 佐 藤 清 5 高橋 | 012-345-6789 090-1122-3344 080-5566-7788 012-0987-6543 090-9900-1234 | 30 37 24 19 24 | 1994-02-01 1987-08-12 2000-12-24 2005-08-01 2000-12-24 | 総務部 総務部 営業部 開発部 総務部 | 九段下 神保町 上井草 上井草 | | | | |
| 5 rows in set (0.00 sec) | | | | | | | | | |

結合の処理はこの記事が非常に参考になりました →http://www.techscore.com/tech/sql/SQL6/06_02.html/

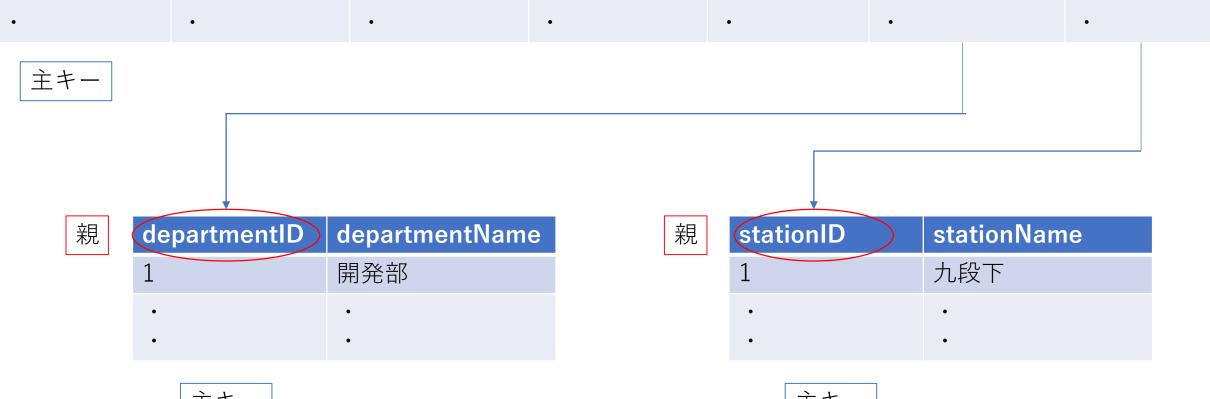
テーブルの相関図

: ややこしくてここで混乱してしまったのでメモ

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子

| userID | name | tell | age | birthday | departmentID | stationID |
|--------|------|--------------|-----|------------|--------------|-----------|
| 1 | 田中実 | 012-345-6789 | 30 | 1994-02-01 | 3 | 1 |
| • | • | • | • | • | • | • |
| • | • | • | • | • | • | • |



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