

primaryKeyとforeignkeyの宣言 課題提出用PDF

実行した内容のテキスト全文 上から順番に実行

・親のテーブルdepartment stationの作成 (primaryKeyの宣言)

```
CREATE TABLE department(departmentID int, FOREIGN KEY (departmentID) REFERENCES user(departmentID),  
departmentName varchar(255)) ENGINE=InnoDB;
```

```
CREATE TABLE station(stationID int, FOREIGN KEY (stationID) REFERENCES user(stationID),  
stationName varchar(255)) ENGINE=InnoDB;
```

・文字コード設定

```
ALTER TABLE department CONVERT TO CHARACTER SET utf8;  
ALTER TABLE station CONVERT TO CHARACTER SET utf8;
```

・インデックス作成

```
ALTER TABLE department ADD INDEX departmentIDid(departmentID);  
ALTER TABLE station ADD INDEX stationIDid(stationID);
```

・insert文

```
insert into department values (1,'開発部'),(2,'営業部'),(3,'総務部');  
insert into station values (1,'九段下'),(2,'永田町'),(3,'渋谷'),(4,'神保町'),(5,'上井草');
```

・子テーブル userの作成 (foreignkeyの宣言)

```
CREATE TABLE user(userID int,name varchar(255),tell varchar(255),age int, birthday date, departmentID int,  
FOREIGN KEY (departmentID)REFERENCES department(departmentID),stationID int,  
FOREIGN KEY (stationID)REFERENCES station(stationID)) ENGINE=InnoDB;
```

・文字コード設定

```
ALTER TABLE user CONVERT TO CHARACTER SET utf8;  
insert文
```

```
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,'1987-08-12',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);
```

show create table ~ の各テーブル実行結果 →

select * from ~ の各テーブル実行結果 ↓

```
ERROR 1096 (HY000): No tables used
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	1987-08-12	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]> show create table user;
+-----+
| Table | Create Table
+-----+
| user | CREATE TABLE `user` (
  `userID` int(11) DEFAULT NULL,
  `name` varchar(255) DEFAULT NULL,
  `tell` varchar(255) DEFAULT NULL,
  `age` int(11) DEFAULT NULL,
  `birthday` date DEFAULT NULL,
  `departmentID` int(11) DEFAULT NULL,
  `stationID` int(11) DEFAULT NULL,
  KEY `departmentID` (`departmentID`),
  KEY `stationID` (`stationID`),
  CONSTRAINT `user_ibfk_1` FOREIGN KEY (`departmentID`) REFERENCES `department` (`departmentID`),
  CONSTRAINT `user_ibfk_2` FOREIGN KEY (`stationID`) REFERENCES `station` (`stationID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8 |
+-----+
1 row in set (0.00 sec)

MariaDB [challenge_db]> show create table department;
+-----+
| Table | Create Table
+-----+
| department | CREATE TABLE `department` (
  `departmentID` int(11) NOT NULL,
  `departmentName` varchar(255) DEFAULT NULL,
  PRIMARY KEY (`departmentID`),
  KEY `departmentIDid` (`departmentID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8 |
+-----+
1 row in set (0.00 sec)

MariaDB [challenge_db]> show create table station;
+-----+
| Table | Create Table
+-----+
| station | CREATE TABLE `station` (
  `stationID` int(11) NOT NULL,
  `stationName` varchar(255) DEFAULT NULL,
  PRIMARY KEY (`stationID`),
  KEY `stationIDid` (`stationID`)
) ENGINE=InnoDB DEFAULT CHARSET=utf8 |
+-----+
1 row in set (0.00 sec)
```