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**题目1**

为艺人表中的'imdbnumber'列创建唯一索引

**SQL**

-- imdbnumber值必须唯一

alter table artist add unique(imdbnumber);

-- 添加imdbnumber值

update Artist set imdbnumber='nm0451148' where id=1;

update Artist set imdbnumber='tt0120812' where id=2;

update Artist set imdbnumber='nm0538324' where id=3;

update Artist set imdbnumber='nm10644657' where id=4;

update Artist set imdbnumber='nm4003072' where id=5;

**题目2**

修改演员表，增加出生地（birthplace），类型与country表的code列一致，并建立外键关联

**SQL**

-- 修改演员表，增加出生地

alter table Artist add `birthplace` char(3) NOT NULL DEFAULT '';

-- 设置字符集为utf-8

alter table artist convert to character set utf8;

-- 增加外键关联

Alter table Artist

add constraint FK\_Name foreign key (birthplace) references country(Code);

**题目3**

使用update语句为已有演员添加相应的出生地

**SQL**

update Artist set birthplace='IND' where id=1;

update Artist set birthplace='HKG' where id=2;

update Artist set birthplace='CHN' where id=3;

update Artist set birthplace='CHN' where id=4;

update Artist set birthplace='CHN' where id=5;

**题目4**

查询所有电影的电影名、时长与上映日期

**SQL**

select name,duration,releasedate

from movie;

**题目5**

查询年龄小于40岁的女演员的姓名和年龄

**SQL**

select name,DATE\_FORMAT(FROM\_DAYS(TO\_DAYS(NOW())-TO\_DAYS(birthday)), '%Y')+0 AS age

from artist

where DATE\_FORMAT(FROM\_DAYS(TO\_DAYS(NOW())-TO\_DAYS(birthday)), '%Y') <40

and sex='女';

**题目6**

查询所有艺人演出的电影名及角色名

**SQL**

select movie.name,rolename

from artist,movie,participation

where artist.id=participation.artistid

and movie.id=participation.movieid;

**题目7**

查询全世界各洲（Continent）的名称

**SQL**

select distinct Continent

from country;

**题目8**

查询南美洲人口数量小于1千万的国家，并按人口由多到少排序

**SQL**

select distinct Continent,Population,name

from country

where Continent='South America'

and Population<10000000

order by Population desc;

**题目9**

查询欧洲国家的数量

**SQL**

select count(name) as SumCountry

from country

where Continent='Europe';

**题目10**

查询人最多和人最少的国家的人口数量（0除外）

**SQL**

select min(Population),max(Population)

from country

where Population!=0;

**题目11**

查询演员出生地都有哪些（结果不能重复）

**SQL**

select distinct birthplace

from artist;

**实验中遇到的问题与解决方法：**

**一、**

**遇到问题：**

添加外键时报错：Error Code: 3780. Referencing column 'birthplace' and referenced column 'Code' in foreign key constraint 'FK\_Name' are incompatible.

**解决办法：**

添加一行alter table artist convert to character set utf8;使得两表的字符集都是utf-8

**二、**

**遇到问题：**

从出生日期转变为年龄时，第一种方法报错，第二种方法查询出错

1.Error Code: 1064. You have an error in your SQL syntax; check the manual that corresponds to your MySQL server version for the right syntax to use near ')) - year(brithday) < 40' at line 3

2.语句where from\_unixtime((unix\_timestamp(now())-unix\_timestamp(birthday))) <40;无结果

**解决办法：**

第三种方法：where DATE\_FORMAT(FROM\_DAYS(TO\_DAYS(NOW())-TO\_DAYS(birthday)), '%Y') <40

**三、**

**遇到问题：**

Error Code: 1828. Cannot drop column 'birthplace': needed in a foreign key constraint 'FK\_Name'

**解决办法：**

先删除索引：

alter table artist drop foreign key FK\_Name;

再删除属性列：

alter table Artist drop birthplace;