Set 13

Winners from 1950

1. 🙄

Change the query shown so that it displays Nobel prizes for 1950.

```
SELECT yr, subject, winner
  FROM nobel
 WHERE yr = 1950
```

[Submit SQL] [Restore default]

Correct answer

yr	subject	winner
1950	Chemistry	Kurt Alder
1950	Chemistry	Otto Diels
1950	Literature	Bertrand Russell
1950	Medicine	Philip S. Hench
1950	Medicine	Edward C. Kendall
1950	Medicine	Tadeus Reichstein
1950	Peace	Ralph Bunche

1962 Literature

2. 🙄

Show who won the 1962 prize for Literature.

```
SELECT winner
  FROM nobel
 WHERE yr = 1962
   AND subject = 'Literature'
```

[Submit SQL] [Restore default]

Correct answer

winner
John Steinbeck

Albert Einstein

3. 🙄

Show the year and subject that won 'Albert Einstein' his prize.

```
SELECT yr, subject
FROM nobel
WHERE winner = 'Albert Einstein'
```

[Submit SQL] [Restore default]

Correct answer

yr	subject
1921	Physics

Recent Peace Prizes

4. 🙄

Give the name of the 'Peace' winners since the year 2000, including 2000.

```
SELECT winner
FROM nobel
WHERE subject = 'Peace' AND yr >= 2000
```

[Submit SQL] [Restore default]

Correct answer

winner
Tunisian National Dialogue Quartet
Kailash Satyarthi
Malala Yousafzai
European Union
Ellen Johnson Sirleaf
Leymah Gbowee
Tawakel Karman

Literature in the 1980's

5. 🙄

Show all details (**yr**, **subject**, **winner**) of the Literature prize winners for 1980 to 1989 inclusive.

```
SELECT yr,subject,winner
FROM nobel
WHERE (yr >= 1980 AND yr <= 1989) AND subject = 'Literature'
```

[Submit SQL] [Restore default]

Correct answer

yr	subject	winner
1989	Literature	Camilo José Cela
1988	Literature	Naguib Mahfouz
1987	Literature	Joseph Brodsky
1986	Literature	Wole Soyinka
1985	Literature	Claude Simon
1984	Literature	Jaroslav Seifert
1983	Literature	William Golding

Only Presidents

6. 🙄

Show all details of the presidential winners:

- Theodore Roosevelt
- Woodrow Wilson
- Jimmy Carter
- Barack Obama

```sql
SELECT * FROM nobel
 WHERE winner IN ('Theodore Roosevelt', 'Woodrow Wilson', 'Jimmy Carter', 'Barack Obama')
```

Correct answer

yr	subject	winner
2009	Peace	Barack Obama
2002	Peace	Jimmy Carter
1919	Peace	Woodrow Wilson
1906	Peace	Theodore Roosevelt

John

7. 🙄

Show the winners with first name John

```sql
SELECT winner
FROM nobel
WHERE winner LIKE 'John%'
```

Submit SQL   Restore default

Correct answer

winner
John O'Keefe
John B. Gurdon
John C. Mather
John L. Hall
John B. Fenn
John E. Sulston
John Pople

Chemistry and Physics from different years

8. 🙄

Show the year, subject, and name of Physics winners for 1980 together with the Chemistry winners for 1984.

```sql
SELECT *
FROM nobel
WHERE (yr = 1980 AND subject = 'Physics') OR (yr = 1984 AND subject = 'Chemistry')
```

Submit SQL   Restore default

Correct answer

yr	subject	winner
1984	Chemistry	Bruce Merrifield
1980	Physics	James Cronin
1980	Physics	Val Fitch

Exclude Chemists and Medics

9. 🙄

Show the year, subject, and name of winners for 1980 excluding Chemistry and Medicine

```sql
SELECT *
FROM nobel
WHERE yr = 1980 AND subject NOT IN ('Chemistry','Medicine')
```

Submit SQL   Restore default

Correct answer

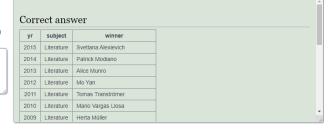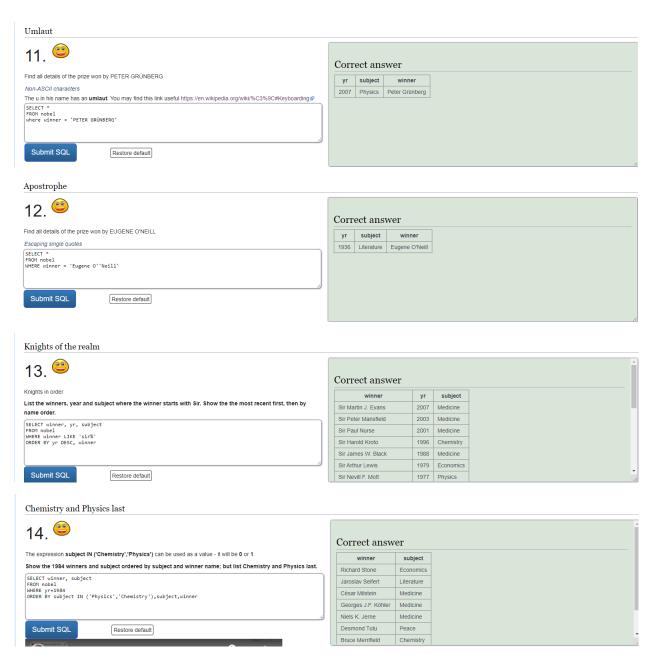| yr	subject	winner
1980	Economics	Lawrence R. Klein
1980	Literature	Czesław Miłosz
1980	Peace	Adolfo Pérez Esquivel
1980	Physics	James Cronin
1980	Physics	Val Fitch

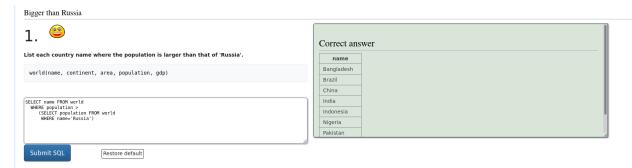## Early Medicine, Late Literature

10. 🙄

Show year, subject, and name of people who won a 'Medicine' prize in an early year (before 1910, not including 1910) together with winners of a 'Literature' prize in a later year (after 2004, including 2004)
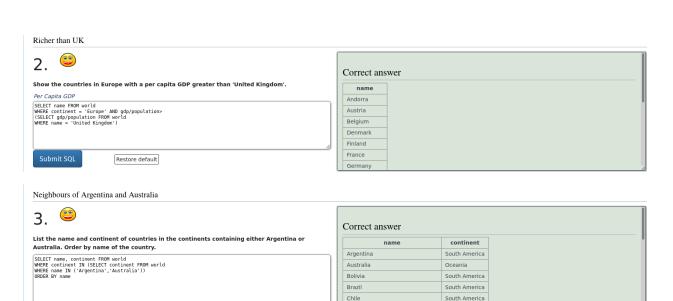
```sql
SELECT *
FROM nobel
where (yr<1910 AND subject = 'Medicine') OR (yr>= 2004 AND subject = 'Literature')
```

Submit SQL   Restore default

Correct answer

yr	subject	winner
2015	Literature	Svetlana Alexievich
2014	Literature	Patrick Modiano
2013	Literature	Alice Munro
2012	Literature	Mo Yan
2011	Literature	Tomas Tranströmer
2010	Literature	Mario Vargas Llosa
2009	Literature	Herta Müller

Umlaut

11. 😳

Find all details of the prize won by PETER GRÜNBERG

Non-ASCII characters

The u in his name has an **umlaut**. You may find this link useful https://en.wikipedia.org/wiki/%C3%9C#Keyboarding

```
SELECT *
FROM nobel
where winner = 'PETER GRÜNBERG'
```

Submit SQL   Restore default

Correct answer

yr	subject	winner
2007	Physics	Peter Grünberg

Apostrophe

12. 😳

Find all details of the prize won by EUGENE O'NEILL

Escaping single quotes

```
SELECT *
FROM nobel
WHERE winner = 'Eugene O''Neill'
```

Submit SQL   Restore default

Correct answer

yr	subject	winner
1936	Literature	Eugene O'Neill

Knights of the realm

13. 😳

Knights in order

List the winners, year and subject where the winner starts with Sir. Show the the most recent first, then by name order.

```
SELECT winner, yr, subject
FROM nobel
WHERE winner LIKE 'sir%'
ORDER BY yr DESC, winner
```

Submit SQL   Restore default

Correct answer

winner	yr	subject
Sir Martin J. Evans	2007	Medicine
Sir Peter Mansfield	2003	Medicine
Sir Paul Nurse	2001	Medicine
Sir Harold Kroto	1996	Chemistry
Sir James W. Black	1988	Medicine
Sir Arthur Lewis	1979	Economics
Sir Nevill F. Mott	1977	Physics

Chemistry and Physics last

14. 😳

The expression **subject IN ('Chemistry','Physics')** can be used as a value - it will be **0** or **1**.

Show the 1984 winners and subject ordered by subject and winner name; but list Chemistry and Physics last.

```
SELECT winner, subject
FROM nobel
WHERE yr=1984
ORDER BY subject IN ('Physics','Chemistry'),subject,winner
```

Submit SQL   Restore default

Correct answer

winner	subject
Richard Stone	Economics
Jaroslav Seifert	Literature
César Milstein	Medicine
Georges J.F. Köhler	Medicine
Niels K. Jerne	Medicine
Desmond Tutu	Peace
Bruce Merrifield	Chemistry

Set 14

Bigger than Russia

1. 😳

List each country name where the population is larger than that of 'Russia'.

```
world(name, continent, area, population, gdp)
```

```
SELECT name FROM world
  WHERE population >
     (SELECT population FROM world
       WHERE name='Russia')
```

Submit SQL   Restore default

Correct answer

name
Bangladesh
Brazil
China
India
Indonesia
Nigeria
Pakistan

Richer than UK

2. 😜

Show the countries in Europe with a per capita GDP greater than 'United Kingdom'.

Per Capita GDP

```
SELECT name FROM world
WHERE continent = 'Europe' AND gdp/population>
(SELECT gdp/population FROM world
WHERE name = 'United Kingdom')
```

Submit SQL   Restore default

Correct answer

name
Andorra
Austria
Belgium
Denmark
Finland
France
Germany

Neighbours of Argentina and Australia

3. 😜

List the name and continent of countries in the continents containing either Argentina or Australia. Order by name of the country.

```
SELECT name, continent FROM world
WHERE continent IN (SELECT continent FROM world
WHERE name IN ('Argentina','Australia'))
ORDER BY name
```

Submit SQL   Restore default

Correct answer

name	continent
Argentina	South America
Australia	Oceania
Bolivia	South America
Brazil	South America
Chile	South America
Colombia	South America
Ecuador	South America

Between Canada and Poland

4. 😜

Which country has a population that is more than Canada but less than Poland? Show the name and the population.

```
SELECT name,population FROM world
WHERE population > (SELECT population FROM world WHERE name = 'Canada')
AND
population < (SELECT population FROM world WHERE name = 'Poland')
```

Submit SQL   Restore default

Correct answer

name	population
Iraq	36004552
Sudan	37289406

Percentages of Germany

5. 😜

Germany (population 80 million) has the largest population of the countries in Europe. Austria (population 8.5 million) has 11% of the population of Germany.

Show the name and the population of each country in Europe. Show the population as a percentage of the population of Germany.

The format should be *Name, Percentage* for example:

name	percentage
Albania	3%
Andorra	0%
Austria	11%
...	...

Decimal places

Percent symbol %

```
SELECT name, CONCAT(ROUND(population/(SELECT population FROM world
WHERE name = 'Germany')*100,0),'%')
FROM world WHERE continent = 'Europe'
```

Submit SQL   Restore default

Correct answer

name	CONCAT(ROUND(..
Albania	3%
Andorra	0%
Austria	11%
Belarus	12%
Belgium	14%
Bosnia and Herzegovina	5%
Bulgaria	9%

Bigger than every country in Europe

6. 🫠

Which countries have a GDP greater than every country in Europe? [Give the name only.] (Some countries may have NULL gdp values)

```
SELECT name FROM world
WHERE gdp > ALL(SELECT gdp FROM world
WHERE gdp > 0 AND continent = 'Europe')
```

Submit SQL   Restore default

Correct answer

name
China
Japan
United States

Largest in each continent

7. 🫠

Find the largest country (by area) in each continent, show the continent, the name and the area:

```
SELECT continent, name, area FROM world x
   WHERE area >= ALL
     (SELECT area FROM world y
         WHERE y.continent=x.continent
             AND area>0)
```

Submit SQL   Restore default

The above example is known as a **correlated** or **synchronized** sub-query.

Using correlated subqueries

A correlated subquery works like a nested loop: the subquery only has access to rows related to a single

Correct answer

continent	name	area
Africa	Algeria	2381741
Oceania	Australia	7692024
South America	Brazil	8515767
North America	Canada	9984670
Asia	China	9596961
Caribbean	Cuba	109884
Europe	Kazakhstan	2724900

First country of each continent (alphabetically)

8. 🫠

List each continent and the name of the country that comes first alphabetically.

```
SELECT continent, name FROM world x
WHERE name <= ALL
(SELECT name FROM world y
WHERE y.continent=x.continent)
```

Submit SQL   Restore default

Correct answer

continent	name
Africa	Algeria
Asia	Afghanistan
Caribbean	Antigua and Barbuda
Eurasia	Armenia
Europe	Albania
North America	Belize
Oceania	Australia

Difficult Questions That Utilize Techniques Not Covered In Prior Sections

9. 🫠

Find the continents where all countries have a population <= 25000000. Then find the names of the countries associated with these continents. Show name, continent and population.

```
SELECT name, continent, population FROM world x
WHERE 25000000 >= ALL(SELECT population
FROM world y
WHERE x.continent = y.continent
AND y.population>0);
```

Submit SQL   Restore default

Correct answer

name	continent	population
Antigua and Barbuda	Caribbean	86295
Australia	Oceania	23545500
Bahamas	Caribbean	351461
Barbados	Caribbean	285000
Cuba	Caribbean	11167325
Dominica	Caribbean	71293
Dominican Republic	Caribbean	9445281

10. 🤩

Some countries have populations more than three times that of any of their neighbours (in the same continent). Give the countries and continents.

```
SELECT name, continent FROM world x
WHERE population >= ALL(SELECT population*3
FROM world y
WHERE x.continent = y.continent
and y.name != x.name)
```

Submit SQL   Restore default

Correct answer

name	continent
Australia	Oceania
Brazil	South America
Russia	Eurasia

5

Total world population

1. 😜

Show the total **population** of the world.

```
world(name, continent, area, population, gdp)
```

```
SELECT SUM(population)
FROM world
```

[Submit SQL] [Restore default]

Correct answer

SUM(populatio..
7118632738

List of continents

2. 😜

List all the continents - just once each.

```
SELECT DISTINCT continent
FROM world
```

[Submit SQL] [Restore default]

Correct answer

continent
Africa
Asia
Caribbean
Eurasia
Europe
North America
Oceania

GDP of Africa

3. 😜

Give the total GDP of Africa

```
SELECT SUM(gdp)
FROM world
WHERE continent = 'Africa'
```

[Submit SQL] [Restore default]

Correct answer

SUM(gdp)
1811788000000

Count the big countries

4. 😜

How many countries have an **area** of at least 1000000

```
SELECT COUNT(name)
FROM world
WHERE area >= 1000000
```

[Submit SQL] [Restore default]

Correct answer

COUNT(name)
29

Baltic states population

5. 😜

What is the total **population** of ('Estonia', 'Latvia', 'Lithuania')

```
SELECT SUM(population) FROM world
WHERE name IN ('Estonia','Latvia','Lithuania')
```

[Submit SQL] [Restore default]

Correct answer

SUM(populatio..
6251750

Counting the countries of each continent

6. 🙄

For each **continent** show the **continent** and number of countries.

```
SELECT continent, COUNT(name) FROM world
GROUP BY continent
```

Submit SQL   Restore default

Correct answer

continent	COUNT(name)
Africa	53
Asia	47
Caribbean	11
Eurasia	2
Europe	44
North America	11
Oceania	14

Counting big countries in each continent

7. 🙄

For each **continent** show the **continent** and number of countries with populations of at least 10 million.

```
SELECT continent, COUNT(name) FROM world
WHERE population >=10000000
GROUP BY continent
```

Submit SQL   Restore default

Correct answer

continent	COUNT(name)
Africa	29
Asia	26
Caribbean	2
Eurasia	1
Europe	14
North America	4
Oceania	1
South America	8

Counting big continents

8. 🙄

List the continents that **have** a total population of at least 100 million.

```
SELECT continent FROM world
GROUP BY continent
HAVING SUM(population) >100000000
```

Submit SQL   Restore default

Correct answer

continent
Africa
Asia
Eurasia
Europe
North America
South America

Set 16

1. 🙄

The first example shows the goal scored by a player with the last name 'Bender'. The `*` says to list all the columns in the table - a shorter way of saying `matchid, teamid, player, gtime`

Modify it to show the *matchid* and *player* name for all goals scored by Germany. To identify German players, check for: `teamid = 'GER'`

```
SELECT matchid,player FROM goal
  WHERE teamid LIKE 'GER'
```

Submit SQL   Restore default

Correct answer

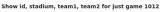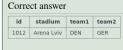| matchid	player
1008	Mario Gómez
1010	Mario Gómez
1010	Mario Gómez
1012	Lukas Podolski
1012	Lars Bender
1026	Philipp Lahm
1026	Sami Khedira

2. 🙄

From the previous query you can see that Lars Bender's scored a goal in game 1012. Now we want to know what teams were playing in that match.

Notice in the that the column `matchid` in the `goal` table corresponds to the `id` column in the `game` table. We can look up information about game 1012 by finding that row in the **game** table.

Show id, stadium, team1, team2 for just game 1012

```
SELECT id,stadium,team1,team2
  FROM game WHERE id = 1012
```

Submit SQL   Restore default

Correct answer

id	stadium	team1	team2
1012	Arena Lviv	DEN	GER

3. 🙄

You can combine the two steps into a single query with a `JOIN`.

```
SELECT *
  FROM game JOIN goal ON (id=matchid)
```

The **FROM** clause says to merge data from the goal table with that from the game table. The **ON** says how to figure out which rows in **game** go with which rows in **goal** - the **matchid** from **goal** must match **id** from **game**. (If we wanted to be more clear/specific we could say `ON (game.id=goal.matchid)`

The code below shows the player (from the goal) and stadium name (from the game table) for every goal scored.

Modify it to show the player, teamid, stadium and mdate for every German goal.

```
SELECT player, teamid, stadium, mdate
FROM game JOIN goal ON (id=matchid)
WHERE teamid = 'GER'
```

[Submit SQL]   [Restore default]

4. 🙄

Use the same `JOIN` as in the previous question.

Show the team1, team2 and player for every goal scored by a player called Mario `player LIKE 'Mario%'`

```
SELECT team1,team2,player
FROM game JOIN goal ON (id=matchid)
WHERE player LIKE 'Mario%'
```

[Submit SQL]   [Restore default]

5. 🙄

The table `eteam` gives details of every national team including the coach. You can `JOIN` `goal` to `eteam` using the phrase `goal JOIN eteam on teamid=id`

Show `player`, `teamid`, `coach`, `gtime` **for all goals scored in the first 10 minutes** `gtime<=10`

```
SELECT player, teamid, coach,gtime
  FROM goal JOIN eteam ON (teamid=id)
  WHERE gtime<=10
```

[Submit SQL]   [Restore default]

6. 🙄

To `JOIN` `game` with `eteam` you could use either `game JOIN eteam ON (team1=eteam.id)` or `game JOIN eteam ON (team2=eteam.id)`

Notice that because `id` is a column name in both `game` and `eteam` you must specify `eteam.id` instead of just `id`

List the dates of the matches and the name of the team in which 'Fernando Santos' was the team1 coach.

```
SELECT mdate,teamname FROM game
JOIN eteam ON (team1 = eteam.id)
WHERE coach = 'Fernando Santos'
```

[Submit SQL]   [Restore default]

7. 🙄

列出場館 'National Stadium, Warsaw'的入球球員。

```
SELECT player FROM goal
JOIN game ON (matchid = id)
WHERE stadium = 'National Stadium, Warsaw'
#I for some reason decided to do it in chinese
```

Submit SQL   Restore default

Correct answer

player
Robert Lewandowski
Dimitris Salpingidis
Alan Dzagoev
Jakub Blaszczykowski
Giorgos Karagounis
Cristiano Ronaldo
Mario Balotelli

8. 😛

The example query shows all goals scored in the Germany-Greece quarterfinal.

Instead show the name of all players who scored a goal against Germany.

HINT

Select goals scored only by non-German players in matches where GER was the id of either **team1** or **team2**.

You can use `teamid!='GER'` to prevent listing German players.

You can use `DISTINCT` to stop players being listed twice.

```
SELECT DISTINCT player
FROM game JOIN goal ON matchid = id
WHERE (team1='GER' OR team2='GER')
AND teamid != 'GER'
```

Submit SQL   Restore default

Correct answer

player
Robin van Persie
Michael Krohn-Dehli
Georgios Samaras
Dimitris Salpingidis
Mario Balotelli

9. 🙄

Show teamname and the total number of goals scored.

COUNT and GROUP BY

You should COUNT(*) in the SELECT line and GROUP BY teamname

```
SELECT teamname, COUNT(*)
  FROM eteam JOIN goal ON id=teamid
GROUP BY teamname
```

Submit SQL   Restore default

Correct answer

teamname	COUNT(*)
Croatia	4
Czech Republic	4
Denmark	4
England	5
France	3
Germany	10
Greece	5

10. 😑

Show the stadium and the number of goals scored in each stadium.

```
SELECT stadium, COUNT(*) FROM goal
JOIN game ON (matchid = id)
GROUP BY stadium
```

Submit SQL   Restore default

Correct answer

stadium	COUNT(*)
Arena Lviv	9
Donbass Arena	7
Metalist Stadium	7
National Stadium, Warsaw	9
Olimpiyskiy National Sports Complex	14
PGE Arena Gdansk	13
Stadion Miejski (Poznan)	8
Stadion Miejski (Wrocław)	9

11. 🙄

For every match involving 'POL', show the matchid, date and the number of goals scored.

```
SELECT matchid,mdate, COUNT(*)
  FROM game JOIN goal ON matchid = id
  WHERE (team1 = 'POL' OR team2 = 'POL')
GROUP BY matchid,mdate
```

Submit SQL   Restore default

Correct answer

matchid	mdate	COUNT(*)
1001	8 June 2012	2
1004	12 June 2012	2
1005	16 June 2012	1

12. 🙄

For every match where 'GER' scored, show matchid, match date and the number of goals scored by 'GER'

```
SELECT matchid, mdate, COUNT(*) FROM goal
JOIN game ON (matchid=id)
WHERE teamid = 'GER'
GROUP BY matchid, mdate
```

Submit SQL   Restore default

Correct answer

matchid	mdate	COUNT(*)
1008	9 June 2012	1
1010	13 June 2012	2
1012	17 June 2012	2
1026	22 June 2012	4
1030	28 June 2012	1

13. 🙄

List every match with the goals scored by each team as shown. This will use "CASE WHEN" which has not been explained in any previous exercises.

mdate	team1	score1	team2	score2
1 July 2012	ESP	4	ITA	0
10 June 2012	ESP	1	ITA	1
10 June 2012	IRL	1	CRO	3
...				

Notice in the query given every goal is listed. If it was a team1 goal then a 1 appears in score1, otherwise there is a 0. You could use SUM this column to get a count of the goals scored by team1. **Sort your result by mdate, matchid, team1 and team2.**

```
SELECT DISTINCT mdate, team1,
SUM(CASE WHEN teamid=team1 THEN 1 ELSE 0 END) score1,team2,

SUM(CASE WHEN teamid=team2 THEN 1 ELSE 0 END) score2
FROM game LEFT JOIN goal ON game.id = goal.matchid

GROUP BY id, mdate, team1, team2
ORDER BY mdate, matchid, team1, team2
```

Submit SQL   Restore default

Correct answer

mdate	team1	score1	team2	score2
1 July 2012	ESP	4	ITA	0
10 June 2012	ESP	1	ITA	1
10 June 2012	IRL	1	CRO	3
11 June 2012	FRA	1	ENG	1
11 June 2012	UKR	2	SWE	1
12 June 2012	GRE	1	CZE	2
12 June 2012	POL	1	RUS	1

MORE

1. 🙄

List the films where the **yr** is 1962 [Show **id**, **title**]

```
SELECT id, title
FROM movie
WHERE yr=1962
```

Submit SQL   Restore default

Correct answer

id	title
10212	A Kind of Loving
10329	A Symposium on Popular Songs
10347	A Very Private Affair (Vie PrivÂ©e)
10648	An Autumn Afternoon
10868	Atraco a las tres
11006	Barabbas
11053	Battle Beyond the Sun (ÐÐµÐ±Ð¾ Ð·Ð¾Ð²ÐµÑ,)

When was Citizen Kane released?

2. 😊

Give year of 'Citizen Kane'.

```
SELECT yr
FROM movie
WHERE title = 'Citizen Kane'
```

Submit SQL   Restore default

Correct answer

yr
1941

Star Trek movies

3. 😊

List all of the Star Trek movies, include the **id**, **title** and **yr** (all of these movies include the words Star Trek in the title). Order results by year.

```
SELECT id,title,yr
FROM movie
WHERE title LIKE '%Star Trek%'
ORDER BY yr
```

Submit SQL   Restore default

17775	Star Trek II: The Wrath of Khan	1982
17776	Star Trek III: The Search for Spock	1984
17777	Star Trek IV: The Voyage Home	1986
17779	Star Trek V: The Final Frontier	1989
17780	Star Trek VI: The Undiscovered Country	1991
17774	Star Trek Generations	1994
17770	Star Trek: First Contact	1996
17771	Star Trek: Insurrection	1998
17778	Star Trek Nemesis	2002
17773	Star Trek	2009

---

id for actor Glenn Close

4. 😊

What **id** number does the actor 'Glenn Close' have?

```
SELECT id FROM actor
WHERE name = 'Glenn Close'
```

Submit SQL   Restore default

Correct answer

id
140

---

id for Casablanca

5. 😊

What is the **id** of the film 'Casablanca'

```
SELECT id FROM movie
WHERE title = 'Casablanca'
```

Submit SQL   Restore default

Correct answer

id
11768

Cast list for Casablanca

6. 🙄

Obtain the cast list for 'Casablanca'.

what is a cast list?

Use **movieid=11768**, (or whatever value you got from the previous question)

```
SELECT name FROM casting
JOIN actor ON (id=actorid)
WHERE movieid=11768
```

[Submit SQL]   [Restore default]

Correct answer

name
Peter Lorre
John Qualen
Madeleine LeBeau
Jack Benny
Dan Seymour
Norma Varden
Ingrid Bergman

Alien cast list

7. 🙄

Obtain the cast list for the film 'Alien'

```
SELECT name FROM casting
JOIN actor ON (id=actorid)
JOIN movie ON (movie.id=movieid)
WHERE title='Alien'
```

[Submit SQL]   [Restore default]

Correct answer

name
John Hurt
Sigourney Weaver
Yaphet Kotto
Harry Dean Stanton
Ian Holm
Tom Skerritt
Veronica Cartwright

Harrison Ford movies

8. 🙄

List the films in which 'Harrison Ford' has appeared

```
SELECT title FROM casting
JOIN movie ON (movie.id = movieid)
JOIN actor ON (actor.id = actorid)
WHERE name = 'Harrison Ford'
```

[Submit SQL]   [Restore default]

Correct answer

title
A Hundred and One Nights
Air Force One
American Graffiti
Apocalypse Now
Clear and Present Danger
Cowboys & Aliens
Crossing Over

Harrison Ford as a supporting actor

9. 🙄

List the films where 'Harrison Ford' has appeared - but not in the starring role. [Note: the **ord** field of casting gives the position of the actor. If ord=1 then this actor is in the starring role]

```
SELECT title FROM casting
JOIN movie ON (movie.id = movieid)
JOIN actor ON (actor.id = actorid)
WHERE name = 'Harrison Ford' AND ord != 1
```

[Submit SQL]   [Restore default]

Correct answer

title
A Hundred and One Nights
American Graffiti
Apocalypse Now
Cowboys & Aliens
Dead Heat on a Merry-Go-Round
Extraordinary Measures
Force 10 From Navarone

Lead actors in 1962 movies

10. 😃

List the films together with the leading star for all 1962 films.

```
SELECT title,name FROM casting
JOIN movie ON (movie.id = movieid)
JOIN actor ON (actor.id = actorid)
WHERE yr = '1962' AND ord = 1
```

Submit SQL   Restore default

Correct answer

title	name
A Kind of Loving	Alan Bates
A Symposium on Popular Songs	Paul Frees
A Very Private Affair (Vie PrivÃ©e)	Brigitte Bardot
An Autumn Afternoon	Chishu Ryu
Atraco a las tres	JosÃ© Luis LÃ³pez VÃ¡zquez
Barabbas	Anthony Quinn
Battle Beyond the Sun (ÐÐµÐ±Ð¾ Ð·Ð¾Ð²ÐµÑ,)	Aleksandr Shvorin

Busy years for Rock Hudson

11. 😃

Which were the busiest years for 'Rock Hudson', show the year and the number of movies he made each year for any year in which he made more than 2 movies.

```
SELECT yr,COUNT(title) FROM
   movie JOIN casting ON movie.id=movieid
        JOIN actor   ON actorid=actor.id
WHERE name='ROCK HUDSON'
GROUP BY yr
HAVING COUNT(title) > 2
```

Submit SQL   Restore default

Correct answer

yr	COUNT(title)
1953	5
1961	3

12. 😃

List the film title and the leading actor for all of the films 'Julie Andrews' played in.

Did you get "Little Miss Marker twice"?

```
SELECT title, name FROM casting
   JOIN movie ON movie.id = movieid
   JOIN actor ON actor.id = actorid
WHERE ord = 1 AND movie.id IN
(SELECT movie.id FROM movie
   JOIN casting ON movie.id = movieid
   JOIN actor ON actor.id = actorid
WHERE actor.name = 'Julie Andrews')
```

Correct answer

title	name
10	Dudley Moore
Darling Lili	Julie Andrews
Despicable Me	Steve Carell
Duet for One	Julie Andrews
Hawaii	Julie Andrews
Little Miss Marker	Walter Matthau
Mary Poppins	Julie Andrews

Actors with 15 leading roles

13. 😃

Obtain a list, in alphabetical order, of actors who've had at least 15 **starring** roles.

```
SELECT name
    FROM casting JOIN actor
     ON  actorid = actor.id
    WHERE ord=1
    GROUP BY name
    HAVING COUNT(movieid)>=15
```

Submit SQL   Restore default

Correct answer

name
Adam Sandler
Al Pacino
Anthony Hopkins
Antonio Banderas
Arnold Schwarzenegger
Barbara Stanwyck
Basil Rathbone

14. 😃

List the films released in the year 1978 ordered by the number of actors in the cast, then by title.

```
SELECT title, COUNT(actorid) FROM casting
JOIN movie ON movieid = movie.id
WHERE yr=1978
GROUP BY title
ORDER BY 2 DESC,1 ASC
```

Submit SQL   Restore default

Correct answer

title	COUNT(actorid)
The Bad News Bears Go to Japan	50
The Swarm	37
Grease	28
American Hot Wax	27
The Boys from Brazil	26
Heaven Can Wait	25
Big Wednesday	21

If I didn't ask in class I"m slightly confused by the ORDER BY 2 DESC, 1 ASC part

15. 😊

List all the people who have worked with 'Art Garfunkel'.

```
SELECT DISTINCT name FROM casting
JOIN actor ON actorid = actor.id
WHERE name != 'Art Garfunkel' AND
movieid IN (SELECT movieid FROM movie
            JOIN casting ON movieid = movie.id
            JOIN actor ON actorid = actor.id
            WHERE actor.name = 'Art Garfunkel'
            )
```

Submit SQL   Restore default

Correct answer

name
Mark Ruffalo
Ryan Phillippe
Mike Myers
Neve Campbell
Salma Hayek
Sela Ward
Breckin Meyer

NULL

NULL, INNER JOIN, LEFT JOIN, RIGHT JOIN

1. 😊

List the teachers who have NULL for their department.

Why we cannot use =

```
SELECT name FROM teacher
WHERE dept is NULL
```

Submit SQL   Restore default

Correct answer

name
Spiregrain
Deadyawn

2. 😊

Note the INNER JOIN misses the teachers with no department and the departments with no teacher.

```
SELECT teacher.name, dept.name
 FROM teacher INNER JOIN dept
        ON (teacher.dept=dept.id)
```

Submit SQL   Restore default

Correct answer

name	name
Shrivell	Computing
Throd	Computing
Splint	Computing
Cutflower	Design

3. 😊

Use a different JOIN so that all teachers are listed.

```
SELECT teacher.name, dept.name
FROM teacher LEFT JOIN dept
ON (teacher.dept = dept.id)
```

Submit SQL   Restore default

Correct answer

name	name
Shrivell	Computing
Throd	Computing
Splint	Computing
Spiregrain	
Cutflower	Design
Deadyawn	

4.

Use a different JOIN so that all departments are listed.

```
SELECT teacher.name, dept.name
FROM teacher RIGHT JOIN dept
ON (teacher.dept = dept.id)
```

Submit SQL Restore default

Correct answer

name	name
Shrivell	Computing
Throd	Computing
Splint	Computing
Cutflower	Design
	Engineering

Using the COALESCE function

5.

Use COALESCE to print the mobile number. Use the number '07986 444 2266' if there is no number given. **Show teacher name and mobile number or '07986 444 2266'**

```
SELECT teacher.name, COALESCE(teacher.mobile,'07986 444 2266')   FROM teacher
```

Submit SQL Restore default

Correct answer

name	COALESCE(teac..
Shrivell	07986 555 1234
Throd	07122 555 1920
Splint	07986 444 2266
Spiregrain	07986 444 2266
Cutflower	07996 555 6574
Deadyawn	07986 444 2266

6.

Use the COALESCE function and a LEFT JOIN to print the teacher **name** and department name. Use the string 'None' where there is no department.

```
SELECT teacher.name, COALESCE(dept.name,'None') FROM teacher
  LEFT JOIN dept ON teacher.dept = dept.id
```

Submit SQL Restore default

Correct answer

name	COALESCE(dept..
Shrivell	Computing
Throd	Computing
Splint	Computing
Spiregrain	None
Cutflower	Design
Deadyawn	None

7.

Use COUNT to show the number of teachers and the number of mobile phones.

```
SELECT COUNT(teacher.name), COUNT(teacher.mobile) FROM teacher
```

Submit SQL Restore default

Correct answer

COUNT(teacher..	COUNT(teacher..
6	3

8.

Use COUNT and GROUP BY **dept.name** to show each department and the number of staff. Use a RIGHT JOIN to ensure that the Engineering department is listed.

```
SELECT dept.name, COUNT(teacher.dept) FROM teacher
RIGHT JOIN dept ON dept.id = teacher.dept
GROUP BY dept.name
```

Submit SQL Restore default

Correct answer

name	COUNT(teacher..
Computing	3
Design	1
Engineering	0

9. 😳

Use CASE to show the **name** of each teacher followed by 'Sci' if the teacher is in **dept** 1 or 2 and 'Art' otherwise.

```
SELECT name, CASE WHEN dept IN (1,2) THEN 'Sci' ELSE 'Art' END
FROM teacher
```

Submit SQL Restore default

Correct answer

name	CASE WHEN dep..
Shrivell	Sci
Throd	Sci
Splint	Sci
Spiregrain	Art
Cutflower	Sci
Deadyawn	Art

10. 😳

Use CASE to show the name of each teacher followed by 'Sci' if the teacher is in dept 1 or 2, show 'Art' if the teacher's dept is 3 and 'None' otherwise.

```
SELECT name, CASE WHEN dept IN (1,2) THEN 'Sci' WHEN dept = 3 THEN 'Art' ELSE 'None' END
FROM teacher
```

Submit SQL Restore default

Correct answer

name	CASE WHEN dep..
Shrivell	Sci
Throd	Sci
Splint	Sci
Spiregrain	None
Cutflower	Sci
Deadyawn	None