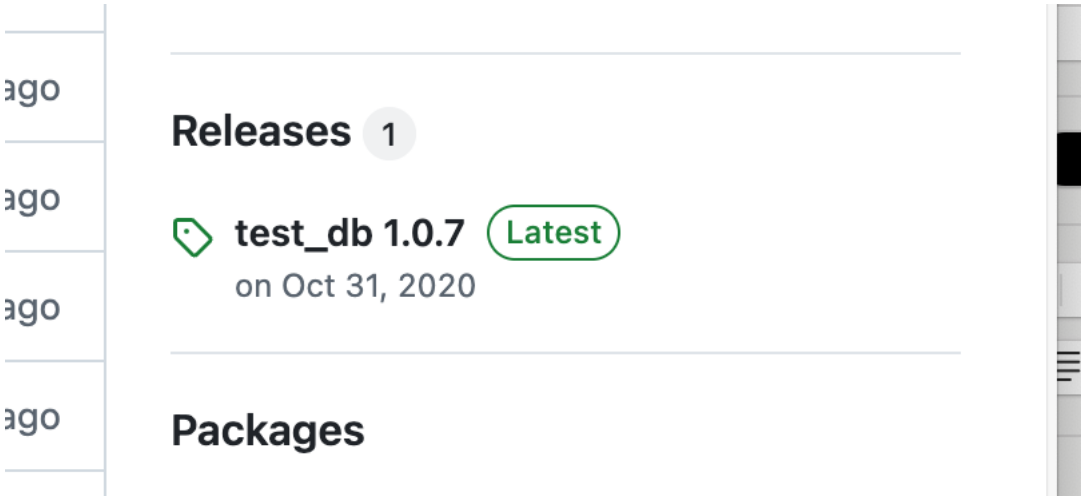
Homework 8 Databases

Install mysql test database employees

Go to https://github.com/datacharmer/test_db and download the repository. The link is on the right of the github page.



After downloading, unzip the repository. Then in a command window or terminal, move to the unzipped directory. Call mysql on it:

```
%mysql -u root -p < employees.sql
```

This should create a database and fill it with records.

Problem 1:

10 pts

Find the first year in which an employee was hired. Your result is on the right.

First Year
1985

Problem 2:

20 pts

Look up SQL's IF-expression, which is different from the IF-statement. Create a table of all employees with first and last name and the label Founder, if they were hired in 1985 and newbie else. Do not use the literal 1985 in your code.

first_name	last_name	Status
Georgi	Facello	Newbie
Bezalel	Simmel	Founder
Parto	Bamford	Newbie
Chirstian	Koblick	Newbie
Kyoichi	Maliniak	Newbie
Anneke	Preusig	Newbie
Tzvetan	Zielinski	Newbie

Problem 3:

15 pts

Look up the BETWEEN operator. Use it to decide whether a department manager was a department manager in 1990. Create a table of all department managers with a column 'active in 1990'. The result in on the right.

first_name	last_name	Active in 1990
Margareta	Markovitch	yes
Vishwani	Minakawa	no
Ebru	Alpin	no
Isamu	Legleitner	yes
Shirish	Ossenbrug…	yes
Karsten	Sigstam	no
Krassimir	Wegerle	no
Rosine	Cools	yes
Shem	Kieras	no

Problem 4:

20 pts

Create a function isActive of a year and an employee number that determines whether the employee was a manager during that year.

Problem 5:

15 pts

Using this function, find the first and last names of all employees that were active managers in 1990.

first_name	last_name
Margareta	Markovitch
Isamu	Legleitner
Shirish	Ossenbrug…
Rosine	Cools
DeForest	Hagimont
Rutger	Hofmeyr
Przemyslawa	Kaelbling
Arie	Staelin
Marjo	Giarratana

Problem 6:

20 pts

Find the gender distribution of managers active in 1995.

gender	Count
M	4
F	5