As per usual, the repository hold several template files, one for each problem. Running the provided `HW4.sql` file in the repository will create a handful of new tables in a *hw4* schema, which will show up to the left (separate from the *public* schema). As we get to using more and more tables, I think placing them in a container like this will help you track them. **The price you pay, though, is that when you refer to the table names in that schema, they must start with the non-standard schema name.** For instance, the superhero's table would be referred to as `hw4.superhero`. Given that you will likely be aliasing the table names anyway, this seems like a small price to pay for not having tables just scattered all throughout your database. Let me know if this is causing you issues.

In order to accept the assignment and get access to the repository, you should follow the link here:

Assignment link: https://classroom.github.com/a/Cp2CNYlD

1. Running the provided `HW4.sql` script in the repository will have created a selection of tables all related to superheroes. I'll include an image of the relationships between the tables in the repository, but you can also navigate here to see an interactive version. A description of the tables is below.

Table name	Description
`superhero`	The main list of superheros. Includes their superhero name, full/real name, a list of IDs linking to other tables, and their height (in centimeters) and weight (in kilograms).
`gender`	The gender of the superhero: Male, Female, or N/A
`color`	Contains references for eye color, skin color, and hair color.
`race`	Shows values for all the different races of superheros, such as Human.
`publisher`	List of all the publishers.
`alignment`	Shows three values to indicate how the superhero is aligned: Good, Neutral, or Bad.
`attribute`	Lists 6 different attributes (such as intelligence) that can describe a superhero.
`hero_attribute`	This table is an intersection of attributes and superheros. A superhero can have multiple attributes, and for each attribute, they can have a value from 0-100 indicating their rating. This table contains those ratings in the `attribute_value` column.
`superpower`	List all the available abilities or superpowers that someone can have.
`hero_power`	Lists the IDs of each power that each superhero can have, since a superhero can have more than one superpower.

Use these tables to answer the following questions:

(a) What percentage of bad or evil superheroes have red eyes?

(b) What is the average intelligence of human superheros?

(c) Who is the heaviest superhero that can fly?

(d) What is the most common superpower for superheros with blond hair?

(e) How many unique combinations of race and gender have no corresponding superheros?

2. Running the provided `HW4.sql` script in the repository will have created a `family_tree` table in your database. This table includes information from several generations of simulated families, including information about marriages and children. A short description of the columns is below:

Column	Description
`pid`	Unique personal identification number of an individual
`name`	The given name of the individual
`spouse_id`	The pid of this individuals spouse. To prevent duplication, this number is only assigned to the individual that marries *into* the family.
`parent1_id`	The pid of this individual's first parent. These are not provided for individuals marrying into the family.
`parent2_id`	The pid of this individual's second parent. These are not provided for individuals marrying into the family.
`yr_birth`	The year this individual was born.
`yr_death`	The year this individual died.
`yr_married`	The year this individual married. Is `NULL` if they never married.
`gender`	`M` for male or `F` for female.

Use this table to answer the following questions:

(a) How many married couples are represented in the data?

(b) What names were duplicated across the family tree? So what individuals have the same name despite being different individuals?

(c) What was the greatest age difference between partners at the time of their marriage?

(d) What is the youngest age at which someone became a grandparent?