# Aggregate functions

Use the SUM function to get the total duration of all films.

select sum(duration)

from films;

Get the average duration of all films.

select avg(duration)

from films;

Get the duration of the shortest film.

select min(duration)

from films;

Get the duration of the longest film.

select max(duration)

from films;

# Aggregate functions practice

Use the SUM function to get the total amount grossed by all films.

select sum(gross)

from films;

Get the average amount grossed by all films.

select avg(gross)

from films;

Get the amount grossed by the worst performing film.

select min(gross)

from films;

Get the amount grossed by the best performing film.

select max(gross)

from films;

# Combining aggregate functions with WHERE

Use the SUM function to get the total amount grossed by all films made in the year 2000 or later.

select sum(gross)

from films

where release\_year >=2000;

Get the average amount grossed by all films whose titles start with the letter 'A'.

select avg(gross)

from films

where title like 'A%';

Get the amount grossed by the worst performing film in 1994.

select min(gross)

from films

where release\_year = 1994;

Get the amount grossed by the best performing film between 2000 and 2012, inclusive.

select max(gross)

from films

where release\_year between 2000 and 2012;

# A note on arithmetic

Ans ==> 3

# It's AS simple AS aliasing

Get the title and net profit (the amount a film grossed, minus its budget) for all films. Alias the net profit as net\_profit.

select title,

gross - budget as net\_profit

from films

Get the title and duration in hours for all films. The duration is in minutes, so you'll need to divide by 60.0 to get the duration in hours. Alias the duration in hours as duration\_hours.

select title,

duration/60.0 as duration\_hours

from films;

Get the average duration in hours for all films, aliased as avg\_duration\_hours.

select

avg(duration)/60.0 as avg\_duration\_hours

from films;

# Even more aliasing

Get the percentage of people who are no longer alive. Alias the result as percentage\_dead. Remember to use 100.0 and not 100!

-- get the count(deathdate) and multiply by 100.0

-- then divide by count(\*)

select count(deathdate) \* 100.0 / count(\*) as percentage\_dead

from people;

Get the number of years between the newest film and oldest film. Alias the result as difference.

-- get the count(deathdate) and multiply by 100.0

-- then divide by count(\*)

select max(release\_year) - min(release\_year) as difference

from films;

Get the number of decades the films table covers. Alias the result as number\_of\_decades. The top half of your fraction should be enclosed in parentheses.

-- get the count(deathdate) and multiply by 100.0

-- then divide by count(\*)

select (max(release\_year) - min(release\_year))/10.0 as number\_of\_decades

from films;