

## Aliasing with Functions (Corrected)

The screenshot shows a web browser with the URL `campus.datacamp.com/courses/intermediate-sql/aggregate-functions-3?ex=10`. The page is titled "Aliasing with functions" and contains the following instructions:

1. Select the `title` and `duration` in hours for all films and alias as `duration_hours`; since the current durations are in minutes, you'll need to divide `duration` by `60.0`.
2. Calculate the percentage of `people` who are no longer alive and alias the result as `percentage_dead`.
3. Find how many decades (period of ten years) the `films` table covers by using `MIN()` and `MAX()`; alias as `number_of_decades`.

The code editor on the right shows the following SQL query for Step 1:

```
1 -- Calculate the title and duration_hours from films
2 SELECT title, ---
3 FROM films;
```

The bottom of the page shows a message: "We closed your session due to inactivity. If the problem persists, please report an issue. Restart Session".

### Question

1. Select the title and duration in hours for all films and alias as `duration_hours`; since the current durations are in minutes, you'll need to divide duration by `60.0`.
2. Calculate the percentage of people who are no longer alive and alias the result as `percentage_dead`.
3. Find how many decades (period of ten years) the films table covers by using `MIN()` and `MAX()`; alias as `number_of_decades`.

### Answer

-- Step 1: Calculate the title and `duration_hours`  
`SELECT title, duration / 60.0 AS duration_hours`  
`FROM films;`

-- Step 2: Calculate the percentage of people who are no longer alive  
`SELECT COUNT(deathdate) * 100.0 / COUNT(*) AS percentage_dead`  
`FROM people;`

-- Step 3: Calculate the number of decades covered in the films table  
`SELECT (MAX(release_year) - MIN(release_year)) / 10 AS`  
`number_of_decades`  
`FROM films;`

## Code Explanation

1. `SELECT title, duration / 60.0 AS duration_hours`: Selects the 'title' column and divides 'duration' by 60.0 to convert minutes into hours, assigning the result the alias 'duration\_hours'.
2. `FROM films`: Specifies the 'films' table as the data source.
3. `SELECT COUNT(deathdate) * 100.0 / COUNT(*) AS percentage_dead`: Counts the number of people with a deathdate (i.e., those who are no longer alive) and calculates the percentage by dividing by the total count of people and multiplying by 100.
4. `FROM people`: Specifies the 'people' table as the data source.
5. `SELECT (MAX(release_year) - MIN(release_year)) / 10 AS number_of_decades`: Finds the range of years in the films table by subtracting the minimum release\_year from the maximum release\_year, dividing the result by 10 to calculate decades, and assigning the alias 'number\_of\_decades'.
6. `FROM films`: Specifies the 'films' table as the data source.