# Project - Backend Developer

## Scenario

A bug occurred on production which needs to be investigated. Testing it with data that's already available in the dev database doesn't yield results. Therefore the bug has to be investigated using the data from production (which actually produces the error).

## Challenges

- We can't just copy the whole database since we are dealing with Gigabytes of data.
- We can't just copy a single entry using SQL since the data structure is complex

## Task

Create a command line tool which copies a table entry (incl. strictly required data) and accepts an option that would also copy additional entries. Also, write unit tests for the CLI tool.

## Usage example

- /bin/copy 123 -> copies feed with ID 123 (incl. all sources)
- /bin/copy --only=instagram 123 -> copies feed with ID 123 and the respective entry from "instagram_sources"
- /bin/copy --only=instagram --include-posts=5 123 -> copies feed with ID 123, the respective entry from "instagram_sources" and 5 posts

## Database structure

### Table "feeds"

- Has a 1:1 relation to *each* of the source tables, e.g. a single feed can have a corresponding entry in instagram_sources *and* tiktok_sources.
- Has a 1:n relation to the posts table, e.g. a single feed can have many posts.

Columns:

- id (integer sequence that is automatically assigned by the database)
- name (real name of an influencer)

### Table "instagram_sources"

Columns:

- name (Instagram handle)
- fan_count (integer >= 0)

### Table "tiktok_sources"

Columns:

- name (TikTok handle)
- fan_count (integer >= 0)

### Table "posts"

Columns:

- id (integer sequence that is automatically assigned by the database)
- url (string)