

LU06 - Assignment: Public Transport

Prerequisites

- **Method of work:** Group work (same group as in LU05)
- **Resources:** Your own database from LU05.
- **Time:** approx. 30 minutes

Background

We would like to **enter, amend and delete VBZ tram routes** from Zurich in our database.

Your tables: **line, stop, journey**.

Task

1. Insert data records

line (columns: name, operator)

```
Linie 4, VBZ
```

```
Linie 11, VBZ
```

```
Linie 8, VBZ
```

bus stop (columns: name, town)

```
Bellevue, Zürich
```

```
Rehalp, Zürich
```

```
Tiefenbrunnen, Zürich
```

```
Klusplatz, Zürich
```

```
Zoo, Zürich
```

journey (Columns: date, departure_time, price, route_id)

```
('2026-09-22', '07:15:00', 4.60, 1),  
( '2026-09-22', '07:45:00', 4.60, 1),  
( '2026-09-22', '08:05:00', 4.60, 2),  
( '2026-09-22', '08:20:00', 4.60, 3),  
( '2026-09-22', '08:40:00', 4.60, 2);
```

2. Deliberately breaking the constraint

Try to add a route **without a name** (name is NOT NULL). Read the error message.

3. Modify data

1. The price for all journeys on line 4 increases to **4.80** - update using WHERE line_id.
2. One journey on line 8 is rescheduled: date **and** departure time are changing - select a specific journey (e.g. by combining date and departure time) and change both columns in a single query.

First, use SELECT to check how many rows are affected by your WHERE condition
- this is particularly important if you're filtering by line_id, as this may affect several journeys at once.

==== 4. Deleting data ==== - A single journey is cancelled - delete it specifically (e.g. by combining date and departure time).

1. All journeys on route 11 will be rescheduled - delete all journeys with 'line_id' 2 in one go.

Remember to carry out a dry run using SELECT before every DELETE.

M290-LU06

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