# Exploring Weather Trends

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#### Introduction

In this project, we want to compare local versus global weather trends. My current location is Switzerland. Inspection of the city\_list table of the SQL database shows that weather data for Switzerland is available for the city of Bern.

```
select city
from city_list
where country = 'Switzerland'
```

### SQL data download

```
select
city,
country,
city_data.year,
city_data.avg_temp as local_average_temperature,
global_data.avg_temp as global_average_temperature
from city_data
full outer join global_data on city_data.year = global_data.year
where country = 'Switzerland' and city = 'Bern'
```

## Showing weather trends

#### Using Python to read the weather data

```
import numpy as np
import pandas as pd
city_data = pd.read_csv("../data/average_temperature_trends.csv")
# global_data = pd.read_
city_data.info()
## <class 'pandas.core.frame.DataFrame'>
## RangeIndex: 271 entries, 0 to 270
## Data columns (total 5 columns):
       Column
                                  Non-Null Count Dtype
                                   _____
## ---
##
  0
       city
                                  271 non-null
                                                  object
## 1
       country
                                  271 non-null
                                                  object
## 2
                                  271 non-null
                                                  int64
       year
## 3
       local_average_temperature
                                  267 non-null
                                                  float64
## 4
       global_average_temperature 264 non-null
                                                  float64
## dtypes: float64(2), int64(1), object(2)
```

## memory usage: 10.7+ KB