Explore Weather Trends:

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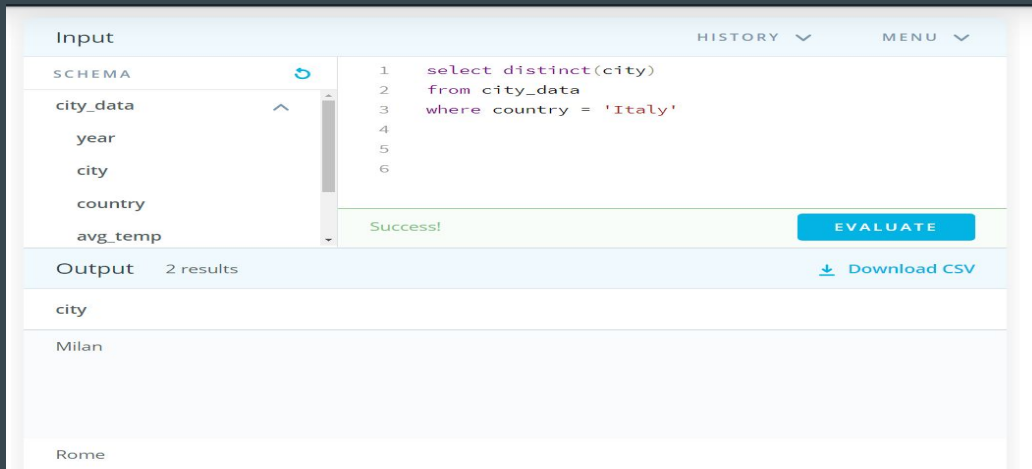
Extract data from database:

First of all I had to choose the city closest to where i live; to do that I filtered the data with a SQL queries from the city_data table as follow:

The city closest to me was Milan.

Data manipulation

To analyze the temperature trend, i wrote an SQL query to visualize in the same table the average global temperature and Milan average temperature .

In this way there are only the years in which both Milan and the rest of the world have data.

Data set is ranged 1750-2013

```sql
SCHEMA                          ⟳
city_data                       ∨
city_list                       ∨
global_data                     ∨
```

```sql
1   select cd.year, cd.city, cd.country, cd.avg_temp
        as average_milan_temperature , gd.avg_temp as
        avgerage_global_temperature
2   from global_data gd
3   join city_data  cd on  cd.year = gd.year
4   where cd.city = 'Milan'
5
```

Success!   **EVALUATE**

Output   264 results   ↓ Download CSV

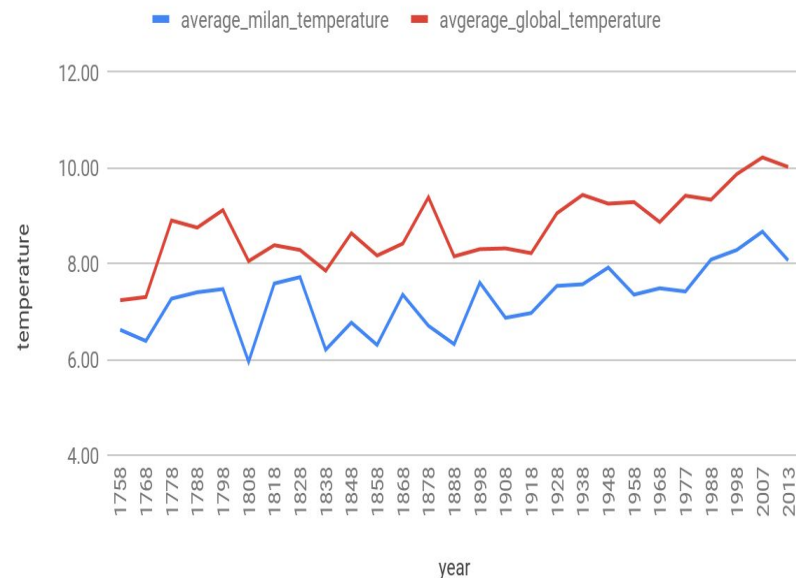| year	city	country	average_milan_temperature	avgerage_global_temperature
1750	Milan	Italy	7.51	8.72

Data visualization:

The first chart represent a comparison between the local city average temperature and the global average temperature

The moving average has been prepared on the same spreadsheet on a 10-year basis.
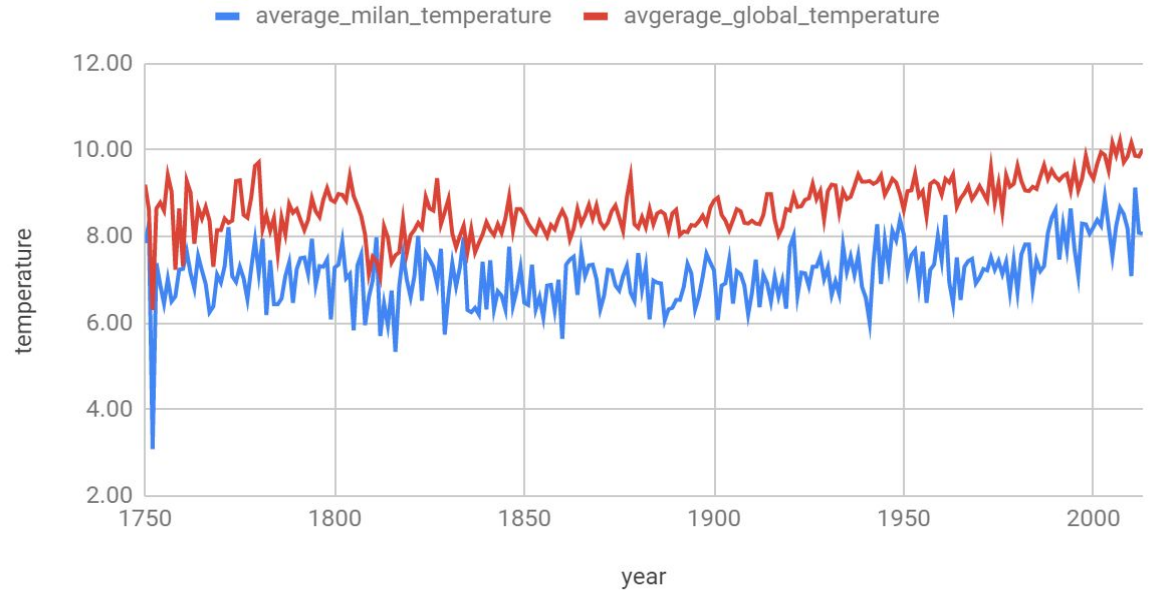
Charts are made with Google sheets.

This other chart shows the every year average temperature of both Milan and of the rest of the world.

Global and Milan temperature change

Observations:

From what we can see from this charts, the following informations may be deduced:

-Milan average temperature is 2 degrees colder than average global temperature.

-Both Milan and global average temperature are increasing proportionally.

-Last graph shows a great decrease of temperature in the world (and Milan) perhaps determined by a natural event during 1752 year.

- We can see that global average temperature is increasing abnormally in the last 4 decades: until 1890s temperature had fluctuated around 8°, from then on, we notice a strong increase in temperature which had reached 10°.