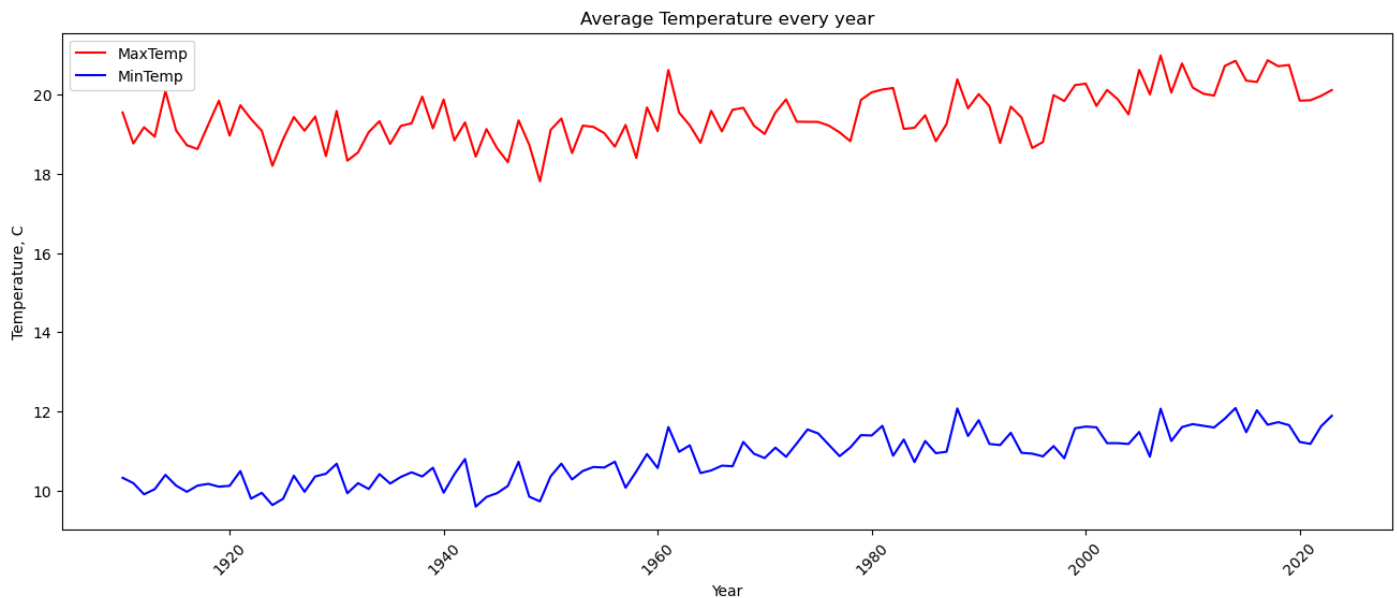


Plot yearly average temperature

Here is the result, much cleaner and shows a small trend in temperature increase over 100 years by 2 degrees.



Here is the code to plot yearly average temperature:

```
import matplotlib.pyplot as plt
import pandas as pd

df_max = pd.read_csv('tmax.csv')
df_min = pd.read_csv('tmin.csv')

# Assuming df_max and df_min are your DataFrames
df_max = df_max.reset_index()
df_min = df_min.reset_index()

# Convert 'Date' column to datetime
df_max['Date'] = pd.to_datetime(df_max['Date'], dayfirst=True)
df_min['Date'] = pd.to_datetime(df_min['Date'], dayfirst=True)

# Calculate average temperature every year
df_max_year_avg = df_max.groupby(df_max['Date'].dt.year)['t_max'].mean().reset_index()
df_min_year_avg = df_min.groupby(df_min['Date'].dt.year)['t_min'].mean().reset_index()
```

```
# Rename columns
df_max_year_avg.columns = ['Year', 'Average Max Temperature']
df_min_year_avg.columns = ['Year', 'Average Min Temperature']

# Plotting
plt.figure(figsize=(16,6))
plt.plot(df_max_year_avg['Year'], df_max_year_avg['Average Max Temperature'], color='red',
label='MaxTemp')
plt.plot(df_min_year_avg['Year'], df_min_year_avg['Average Min Temperature'], color='blue',
label='MinTemp')
plt.legend()
plt.xlabel('Year')
plt.ylabel('Temperature, C')
plt.title('Average Temperature every year')
plt.xticks(rotation=45)
plt.show()
```

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