In [12]:
```
import requests
import pandas as pd
import json
import matplotlib.pyplot as plt
import seaborn as sns

API_key = '89b6535b863227f5b3200a4f58ca7650'

countries = ['Jamaica', 'Indonesia', 'United States',  "Turkey", 'Saudi Arabia' , "Egypt", 'China']

country_name_list = []
maxtemp = []
mintemp = []
humidity = []
windspeed = []

for country_names in countries:

    url = f'http://api.openweathermap.org/data/2.5/weather?q={country_names}&APPID={API_key}&units=imperial'

    r = requests.get(url)

    data = r.json()

    formatted_json = json.dumps(data, sort_keys = True, indent = 4)

    country_name_list.append(data['name'])
    maxtemp.append(data['main']['temp_max'])
    mintemp.append(data['main']['temp_min'])
    humidity.append(data['main']['humidity'])
    windspeed.append(data['wind']['speed'])


df = pd.DataFrame()
df['Names'] = country_name_list
df['Max_Temp'] = maxtemp
df['Min_Temp'] = mintemp
df['Humidity'] = humidity
df['WindSpeed'] = windspeed

df.head()
```

Out[12]:

	Names	Max_Temp	Min_Temp	Humidity	WindSpeed
0	Jamaica	89.91	89.91	52	10.78
1	Indonesia	72.34	72.34	73	4.23
2	United States of America	49.41	49.41	45	14.07
3	Turkey	56.12	56.12	84	3.31
4	Saudi Arabia	81.48	81.48	13	4.72

In [13]:
```
df.isna().sum()
```

Out[13]:
```
Names        0
Max_Temp     0
Min_Temp     0
Humidity     0
WindSpeed    0
dtype: int64
```

In [14]:
```
df.duplicated().sum()
```

Out[14]:
```
0
```

In [15]:
```
df.describe()
```

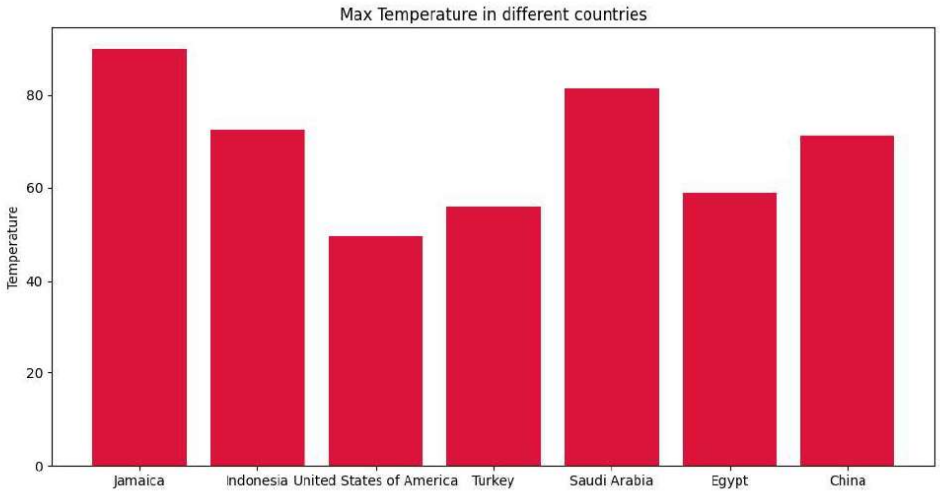
Out[15]:

	Max_Temp	Min_Temp	Humidity	WindSpeed
count	7.000000	7.000000	7.000000	7.000000
mean	68.455714	67.607143	52.714286	9.261429
std	14.490269	15.299906	24.095050	5.025695
min	49.410000	49.410000	13.000000	3.310000
25%	57.470000	54.500000	40.500000	4.475000
50%	71.110000	71.110000	52.000000	10.780000
75%	76.910000	76.910000	69.500000	13.410000
max	89.910000	89.910000	84.000000	14.970000

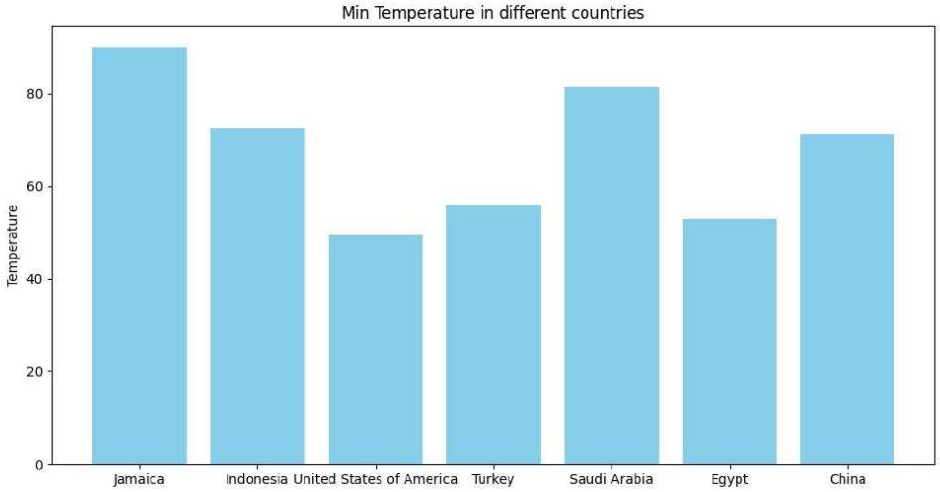
In [16]:
```
df.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 7 entries, 0 to 6
Data columns (total 5 columns):
 #   Column     Non-Null Count  Dtype
---  ------     --------------  -----
 0   Names      7 non-null      object
 1   Max_Temp   7 non-null      float64
 2   Min_Temp   7 non-null      float64
 3   Humidity   7 non-null      int64
 4   WindSpeed  7 non-null      float64
dtypes: float64(3), int64(1), object(1)
memory usage: 408.0+ bytes
```

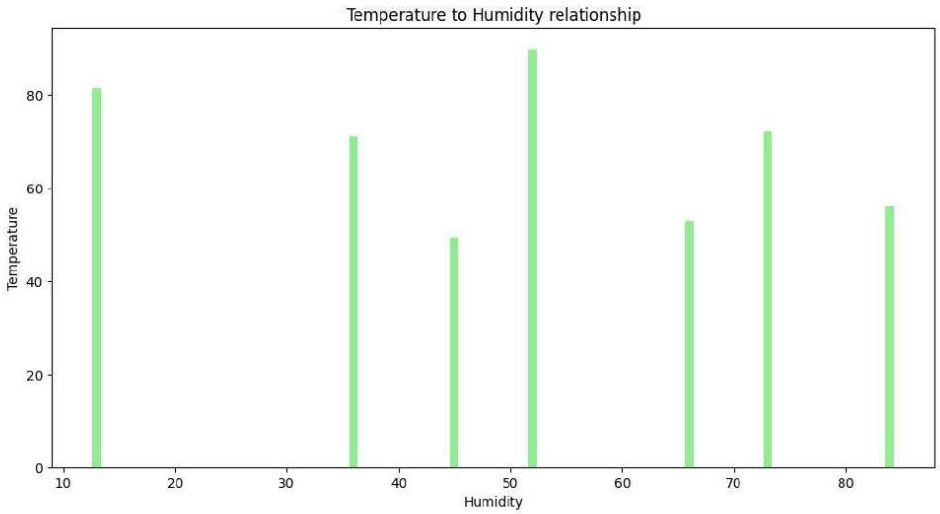
In [28]:
```
plt.figure(figsize=(12,6))
plt.bar(df['Names'], df['Max_Temp'], color='crimson')
plt.title("Max Temperature in different countries")
plt.ylabel("Temperature")
plt.show()
```



In [29]:
```
plt.figure(figsize=(12,6))
plt.bar(df['Names'], df['Min_Temp'], color='skyblue')
plt.title("Min Temperature in different countries")
plt.ylabel("Temperature")
plt.show()
```



In [42]:
```
plt.figure(figsize=(12,6))
plt.bar(df['Humidity'], df['Min_Temp'], color='lightgreen')
plt.title("Temperature to Humidity relationship")
plt.ylabel("Temperature")
plt.xlabel("Humidity")
plt.show()
```



In [ ]: