Data Analysis

## 1. Latitude vs. Temperature Plot

This graph shows the higher temperature on the higher latitude.

## 2. Latitude vs. Humidity Plot

This graph shows humidity spread-out across latitude and more humidity on higher latitude areas.

## 3.Latitude vs. Cloudiness Plot

Graph represents even distribution of clouds on latitude.

## 4. Latitude vs. Wind Speed Plot

Graph represents high wind speed on lower latitude and less wind speed on higher latitude.

#### 5.**Northern Hemisphere - Max Temp vs. Latitude Linear Regression**

Regression line equation is: y = -0.46x + 90.13

The regression displays a negative correlation.

In the northern hemisphere, as you move away from the equator the temperature decreases.

The r-squared is: 0.4464807481901879

#### 6.Southern Hemisphere - Max Temp vs. Latitude Linear Regression

Regression line equation is: y = 0.63x + 78.08

The regression displays a negative correlation.

In the northern hemisphere, as you move away from the equator the temperature decreases.

The r-squared is: 0.5205351061361121

#### 7. Northern Hemisphere - Humidity (%) vs. Latitude Linear Regression

Regression line equation is: y = 0.01x + 71.28

The regression displays a negative correlation.

In the northern hemisphere, as you move away from the equator the temperature decreases.

The r-squared is: 4.616933935016991e-05

#### 8. Southern Hemisphere - Humidity (%) vs. Latitude Linear Regression

Regression line equation is: y = 0.24x + 74.79

The regression displays a negative correlation.

In the northern hemisphere, as you move away from the equator the temperature decreases.

The r-squared is: 0.03426049192265916

#### 9. Northern Hemisphere - Cloudiness (%) vs. Latitude Linear Regression

Regression line equation is: y = -0.14x + 61.44

The regression displays a negative correlation.

In the nothern hemisphere, as you move away from the equator the temperature decreases.

The r-squared is: 0.0058104950855491

#### 10.Southern Hemisphere - Cloudiness (%) vs. Latitude Linear Regression

Regression line equation is: y = 0.36x + 54.12

The regression displays a negative correlation.

In the northern hemisphere, as you move away from the equator the temperature decreases.

The r-squared is: 0.021741699687075722

#### 11. Northern Hemisphere - Wind Speed (mph) vs. Latitude Linear Regression

Regression line equation is: y = -0.03x + 8.97

The regression displays a negative correlation.

In the northern hemisphere, as you move away from the equator the temperature decreases.

The r-squared is: 0.01485314353104416

#### 12. Southern Hemisphere - Wind Speed (mph) vs. Latitude Linear Regression

Regression line equation is: y = -0.14x + 5.79

The regression displays a negative correlation.

In the northern hemisphere, as you move away from the equator the temperature decreases.

The r-squared is: 0.08815670920123403