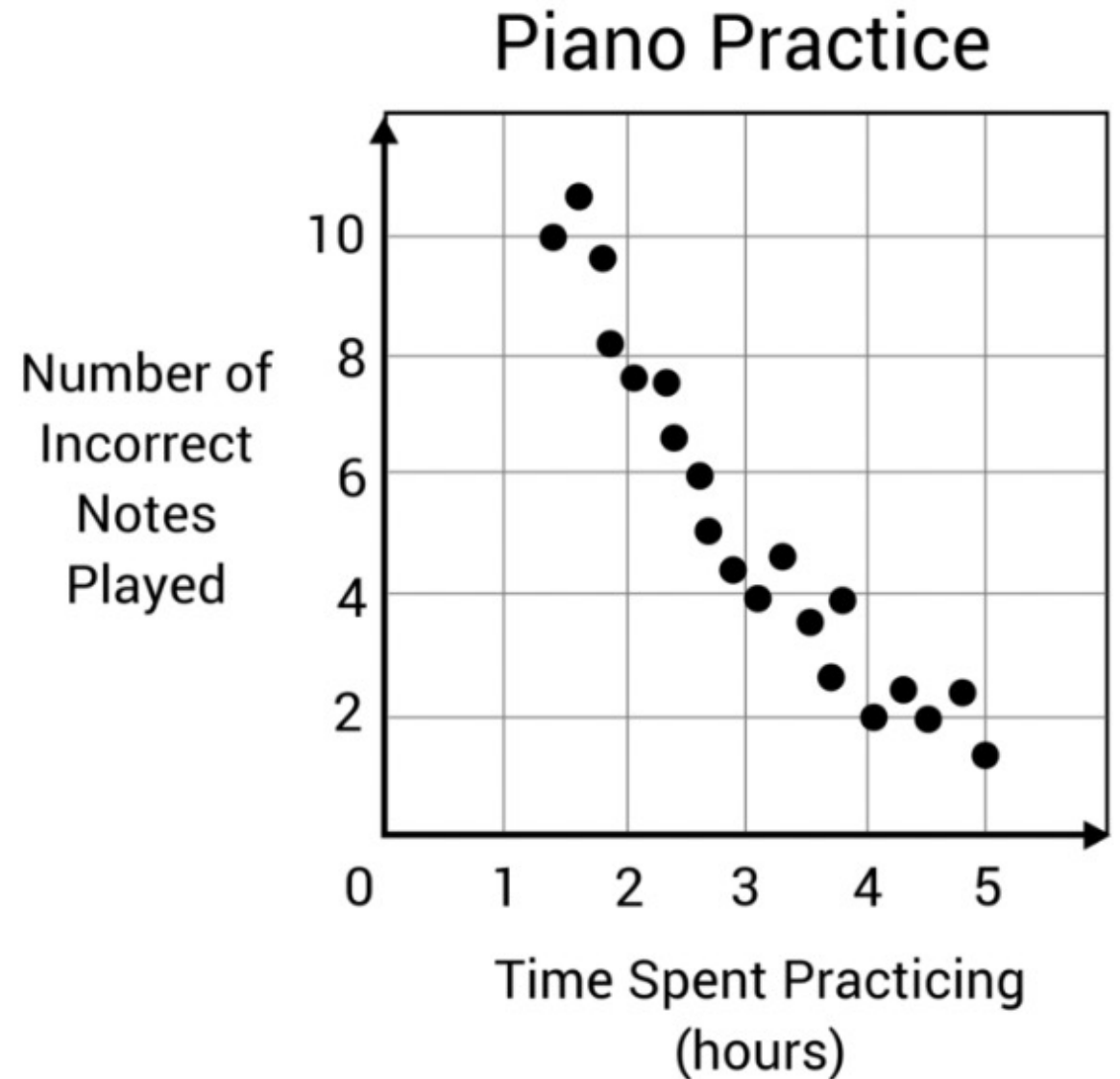# Styling Plotly Charts

How to Add Extra Options to Customize Plotly Charts
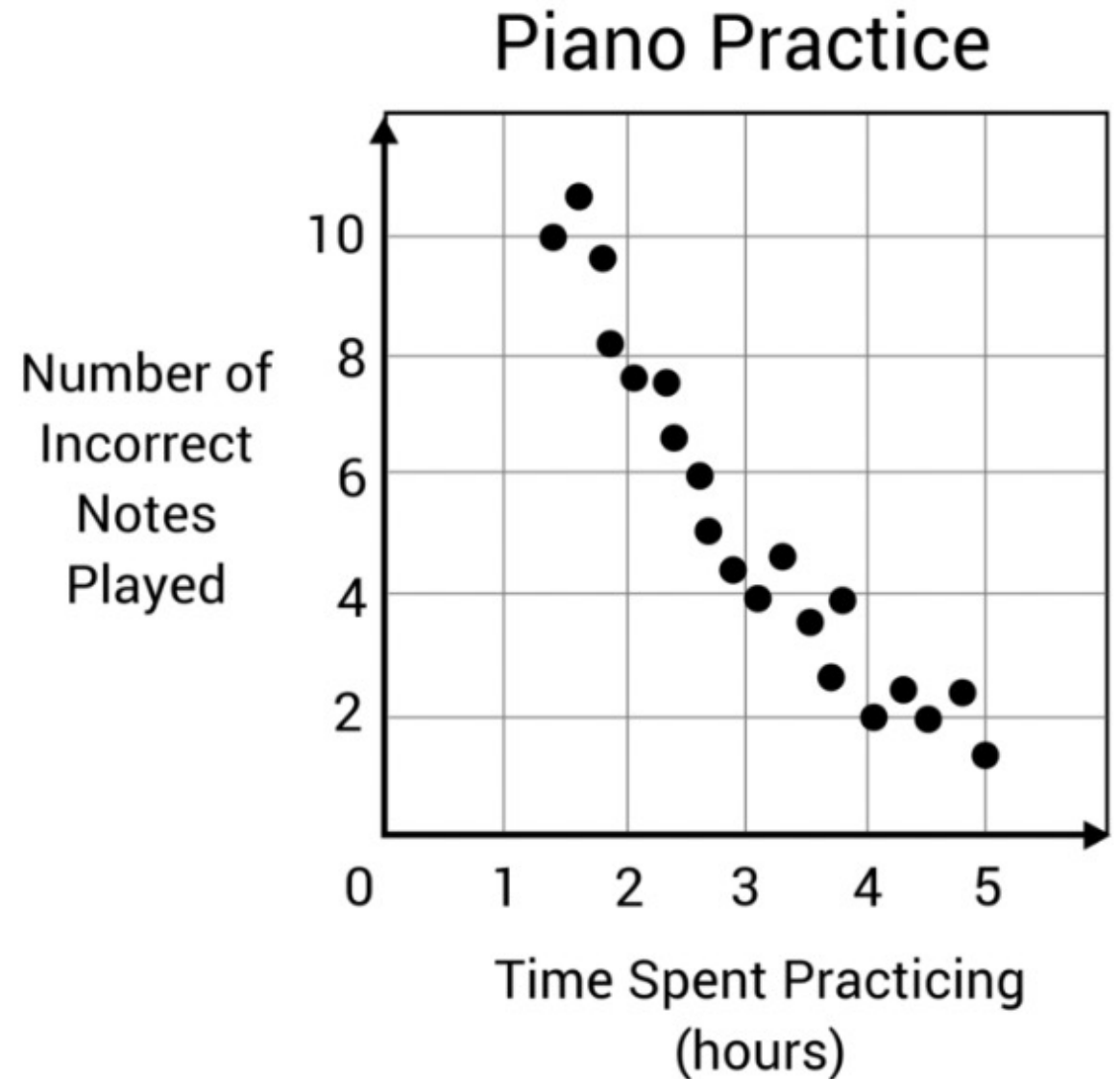
Think Share Activity

- What are the parts of a chart?
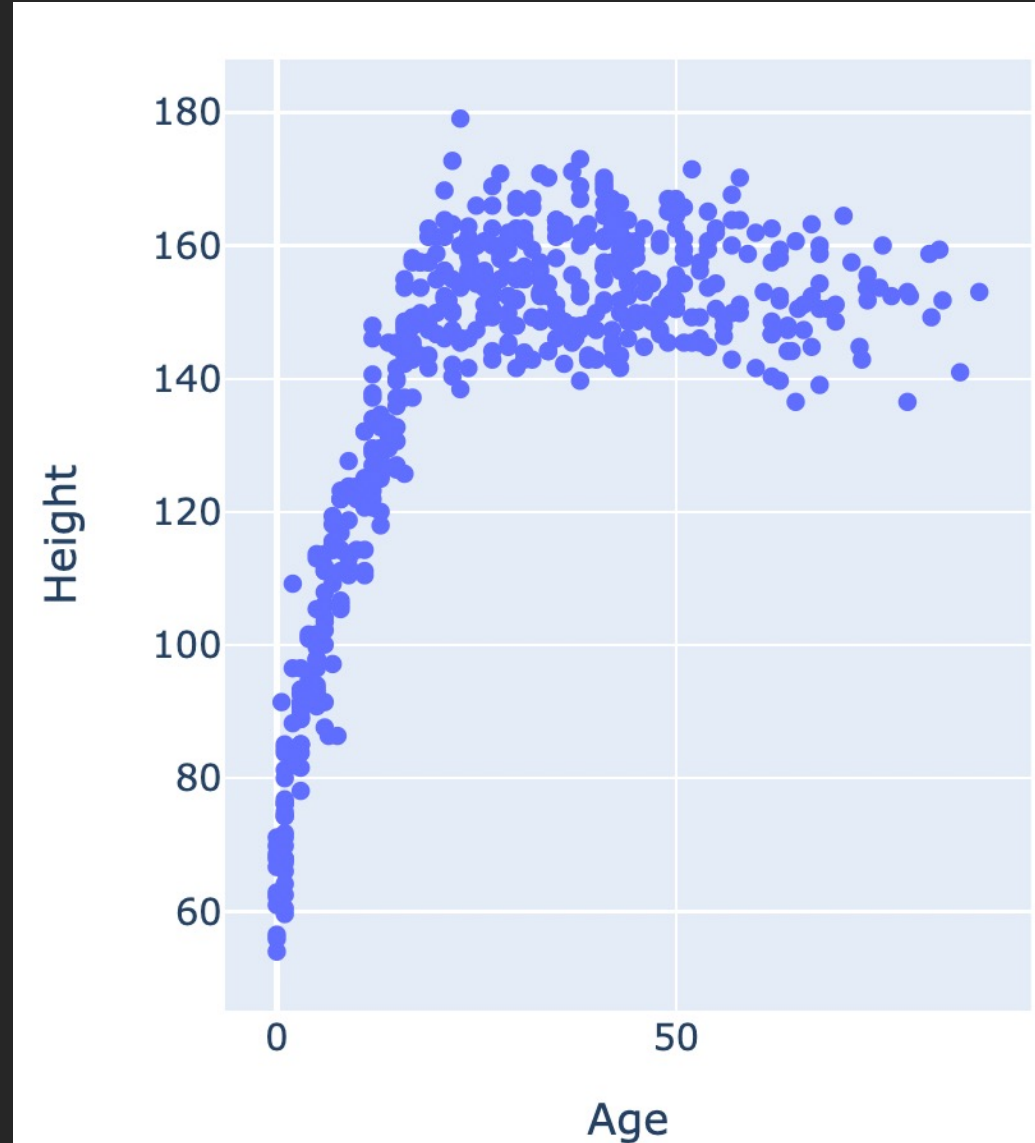
Parts of a Chart

- Title
- Chart body
  - Axes
  - Coordinate space
  - Points, lines
- Axis labels
- Color legend

Piano Practice

Number of Incorrect Notes Played
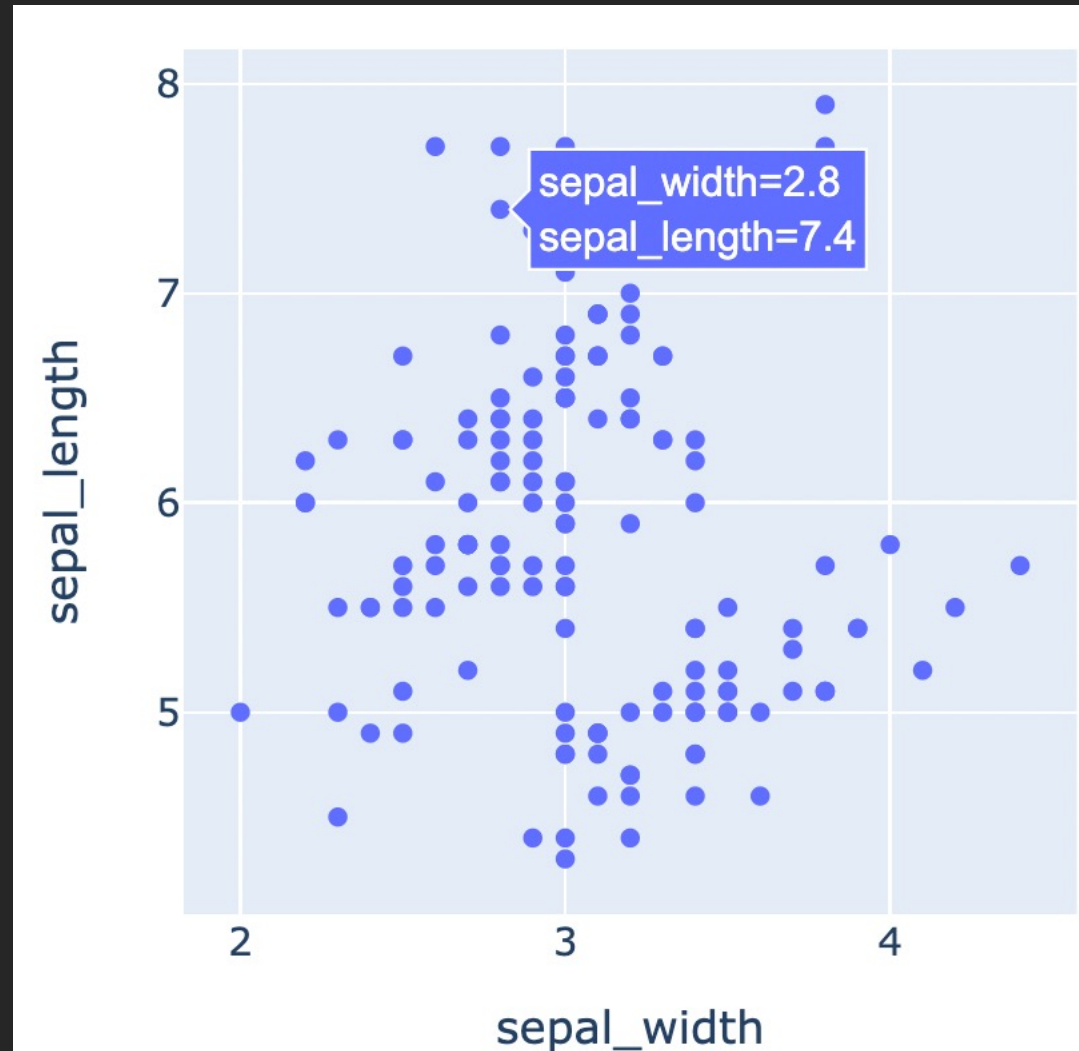
Time Spent Practicing (hours)

Default Plotly Chart Styling

- For this dataset column names were:
  - Age
  - Height
  - Gender

- Axis labels depend on column names
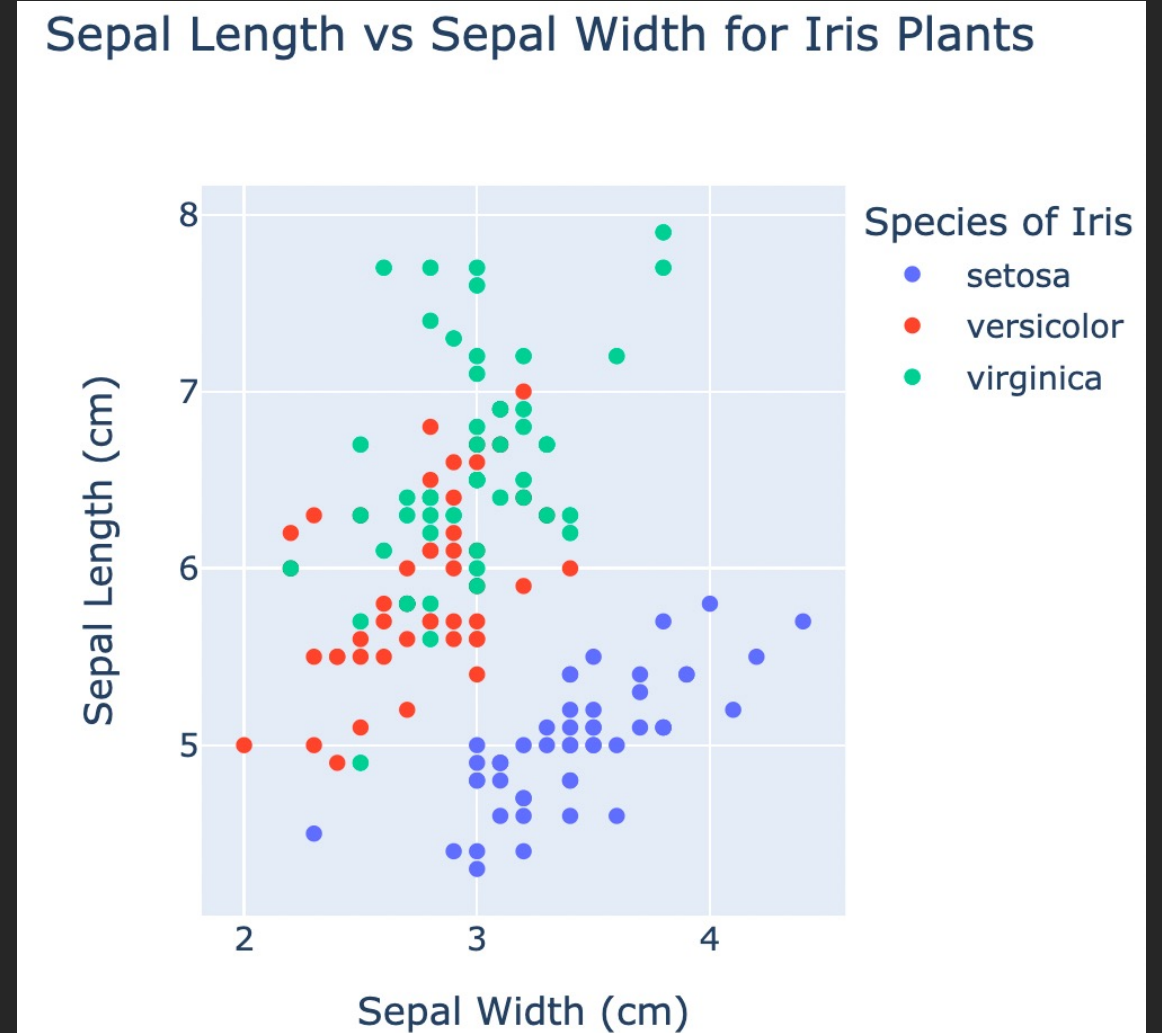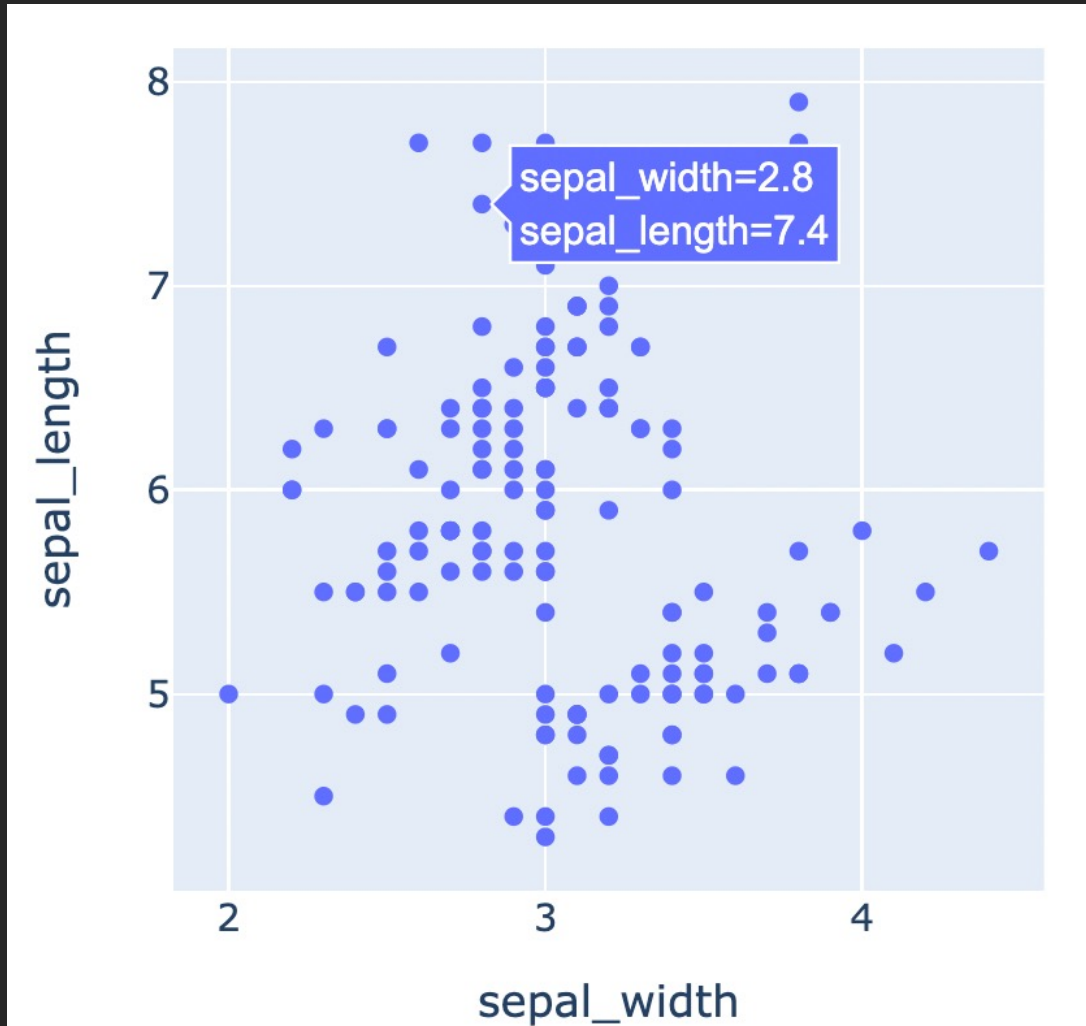
- Looks pretty good, except no title

Default Plotly Chart Styling

- For this dataset column names were:
  - sepal_length
  - sepal_width

- Doesn't look so nice...

- But we can customize!

Plotly Chart Options: Before & After

Plotly Chart Options

- Many options to change!

- Set title
- Set color of each point based on an additional variable
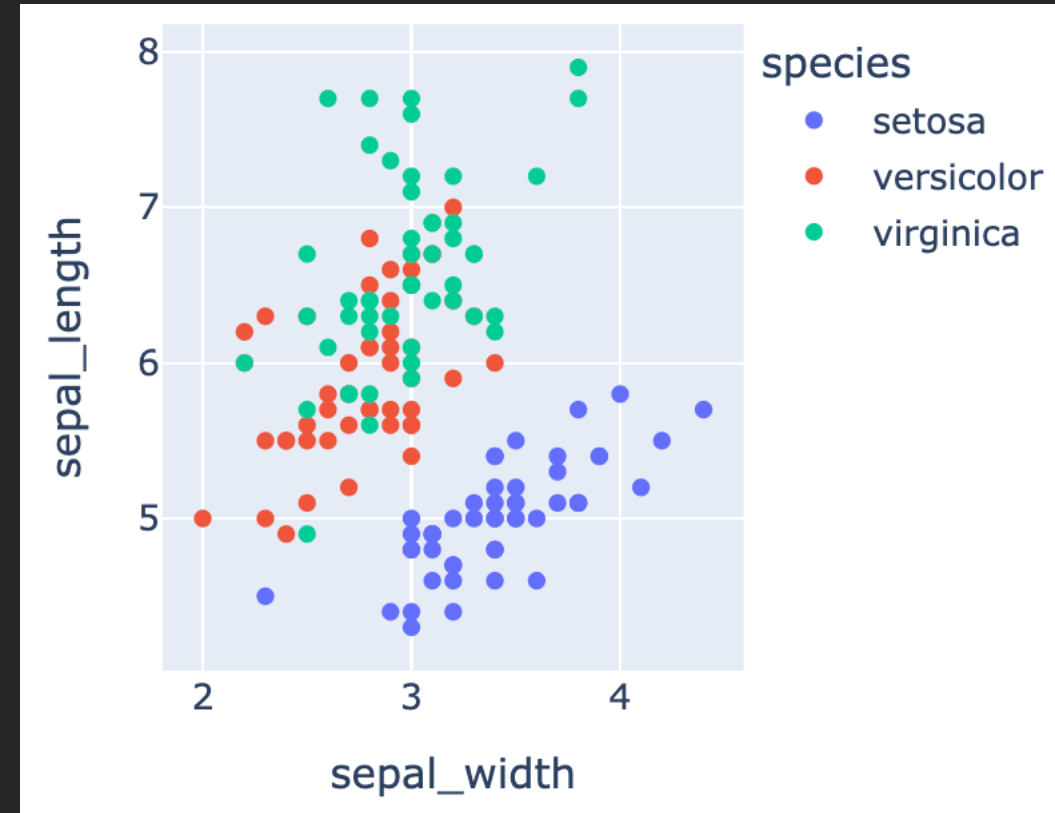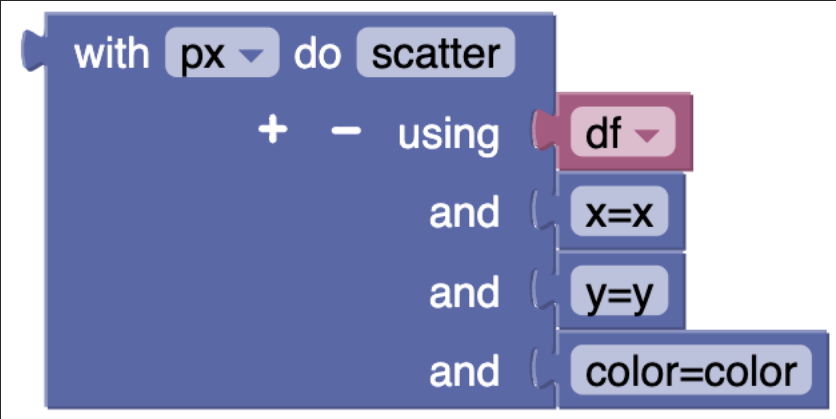- Change chart labels

How-to: Set Color of Points w/ Variable
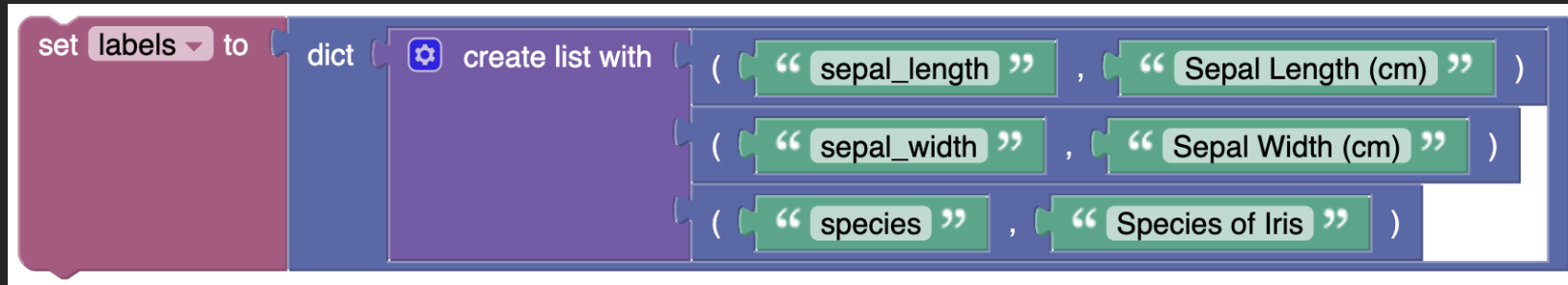
- Add an extra option to px.scatter

How-to: Change Label Text
Dictionaries in Blockly

- This is a **dictionary**, a kind of key-value storage.

```
labels = {
  "sepal_length": "Sepal Length (cm)",
  "sepal_width": "Sepal Width (cm)",
  "species": "Species of Iris"
}
```
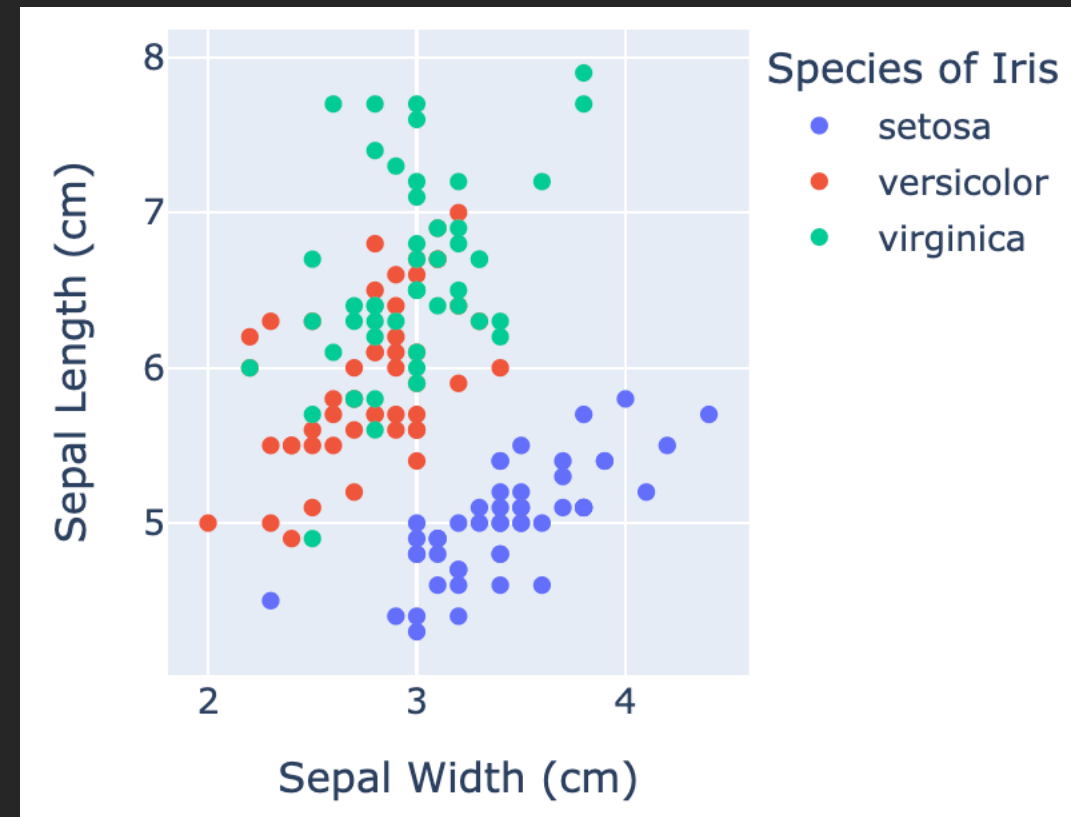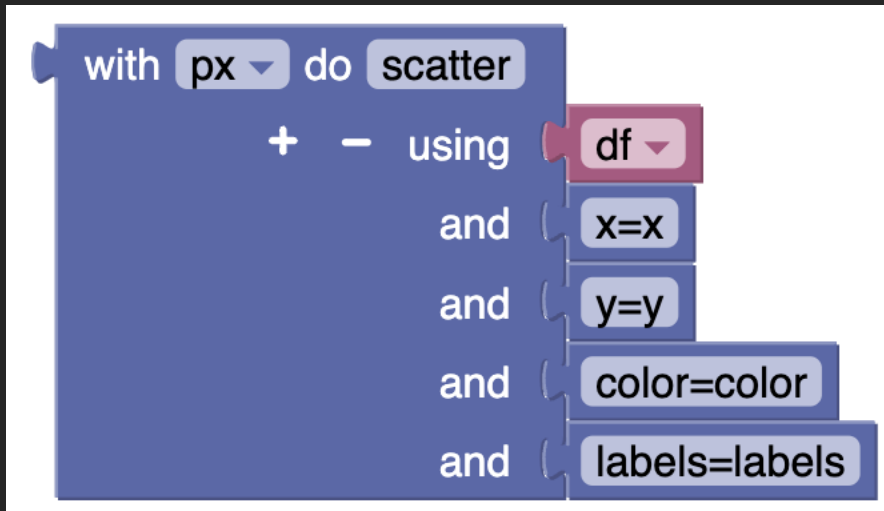

- Blockly doesn't always generate code that is easy to read.

```
labels = dict([('sepal_length','Sepal Length (cm)'), ('sepal_width','Sepal Width (cm)'), ('species','Species of Iris')])
```

How-to: Change Label Text (cont.)

- Add an extra option to px.scatter
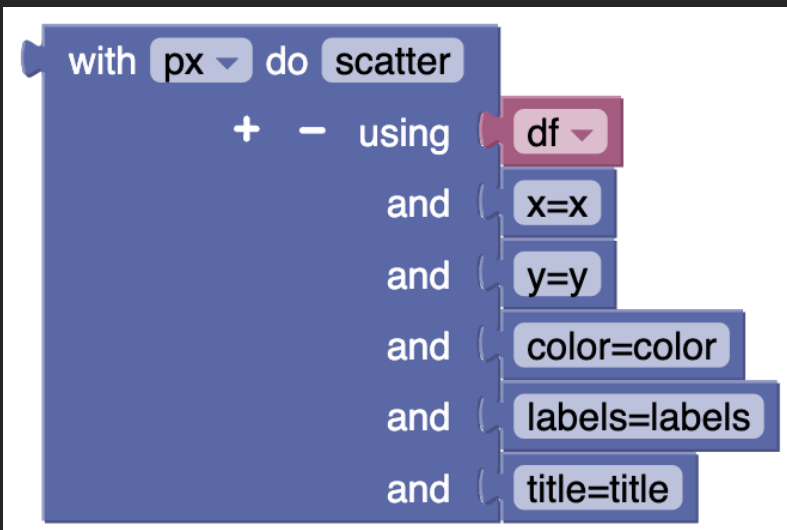
```
px.scatter(df,x=x,y=y,color=color,labels=labels)
```

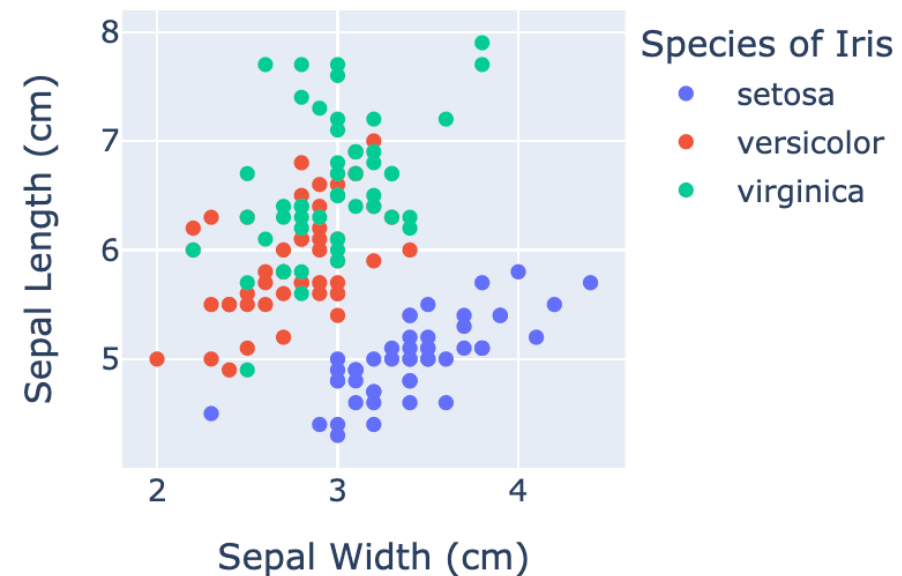# How-to: Add Chart Title

- Add an extra option to px.scatter

```
title = 'Sepal Length vs Sepal Width for Iris Plants'
```

```
set title to " Sepal Length vs Sepal Width for Iris Plants "
```

```
px.scatter(df,x=x,y=y,color=color,labels=labels,title=title)
```

```
with px do scatter
    + - using df
         and x=x
         and y=y
         and color=color
         and labels=labels
         and title=title
```


Sepal Length vs Sepal Width for Iris Plants

Species of Iris
- setosa
- versicolor
- virginica

Summary

- Parts of a chart
- Some ways to customize Plotly charts
- Plotly chart options with Blockly