In [1]:

```python
import plotly.graph_objs as go
import plotly.express as pex
```

In [2]:

```python
import seaborn as sns
```

In [3]:

```python
df =sns.load_dataset('iris')
df.head()
```

Out[3]:

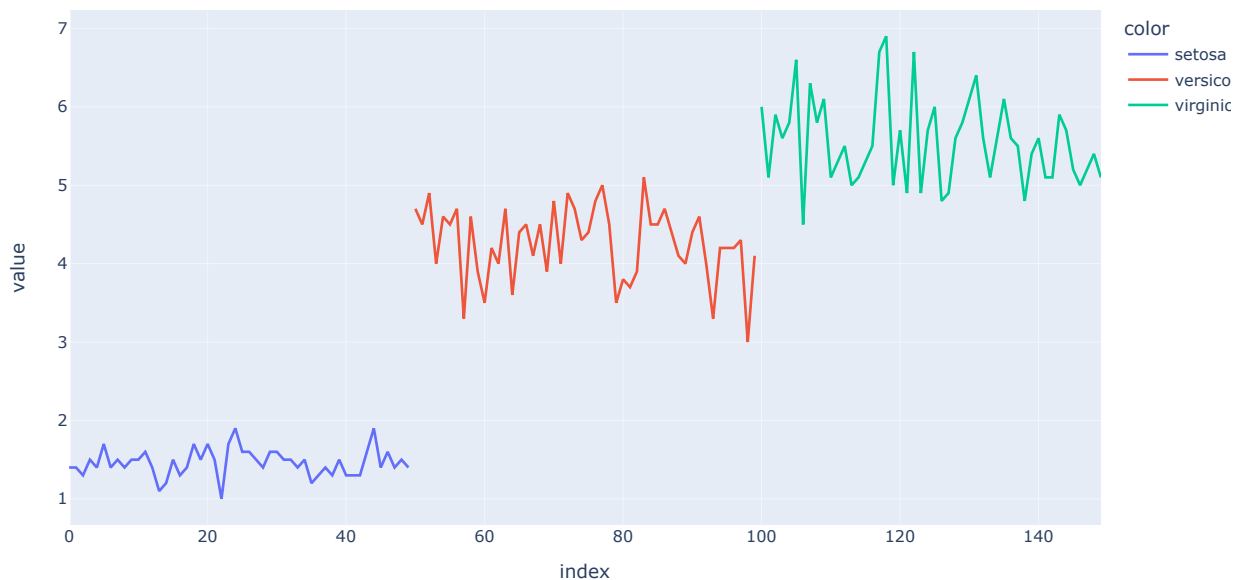|	sepal_length	sepal_width	petal_length	petal_width	species
0	5.1	3.5	1.4	0.2	setosa
1	4.9	3.0	1.4	0.2	setosa
2	4.7	3.2	1.3	0.2	setosa
3	4.6	3.1	1.5	0.2	setosa
4	5.0	3.6	1.4	0.2	setosa

In [4]:

```python
# line,bar,scatter,histogram,box,scatter_matrix,imshow,pie,violin

# we don't need to rembember all the agruments of all the charts
# we just need to some basic arguments
# Like ----------> data,x,y,color,size,animation_frame,template,
# pie----> names,values
# sctter ---->marginal_x,marginal_y
# scatter_matrix -->data,dimensions
```
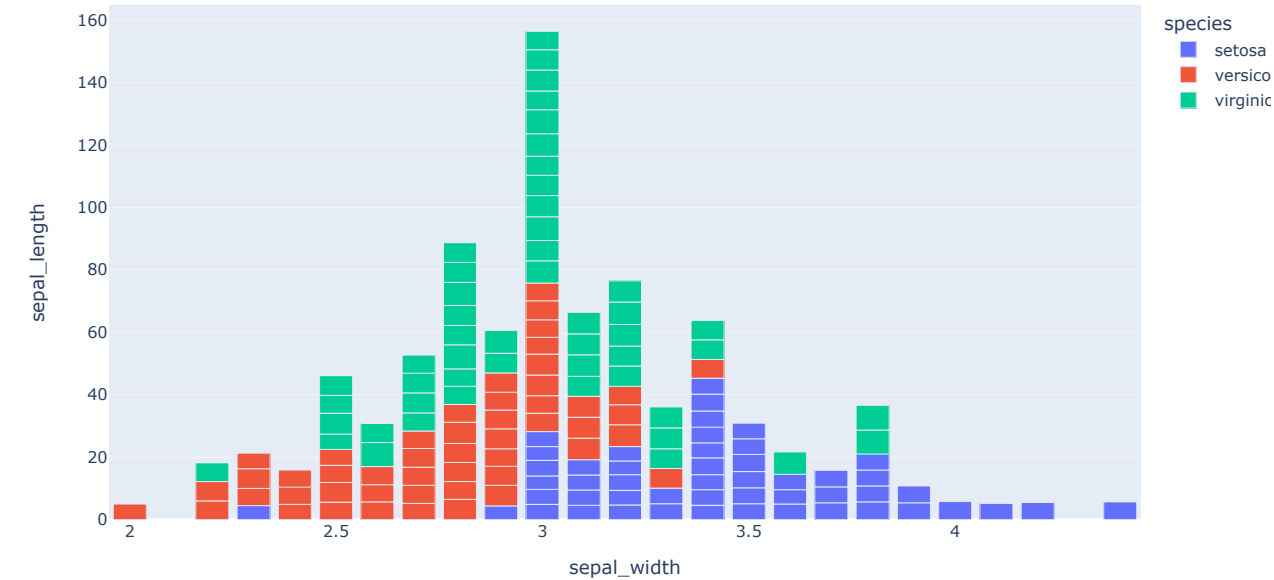
In [5]:

```python
fig = pex.line(df['petal_length'],color=df['species'])
fig.show()
```
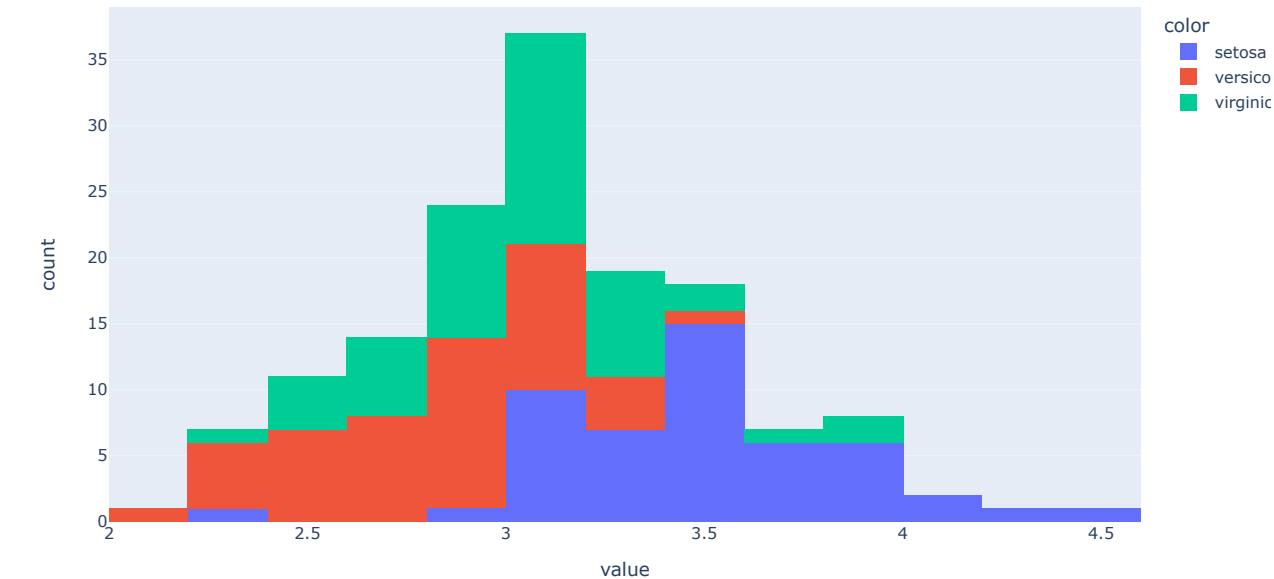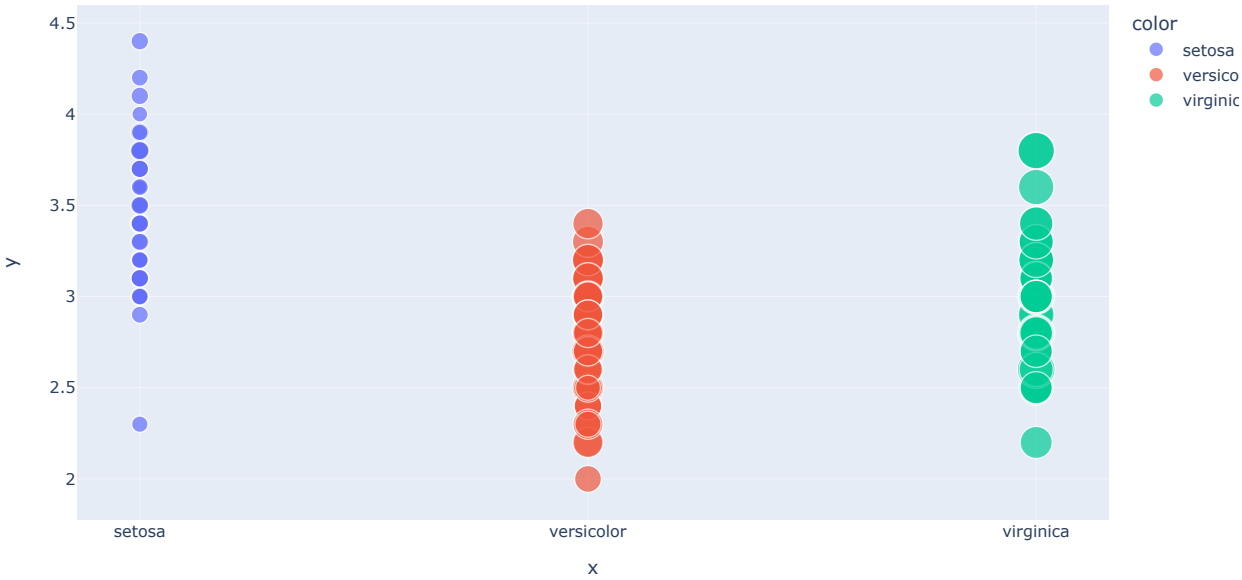
In [6]:

```python
fig = pex.bar(df,x='sepal_width',y='sepal_length',color='species') #,animation_frame='species')
fig.show()
```


In [7]:

```python
fig = pex.histogram(df['sepal_width'],color=df['species'])
fig.show()
```
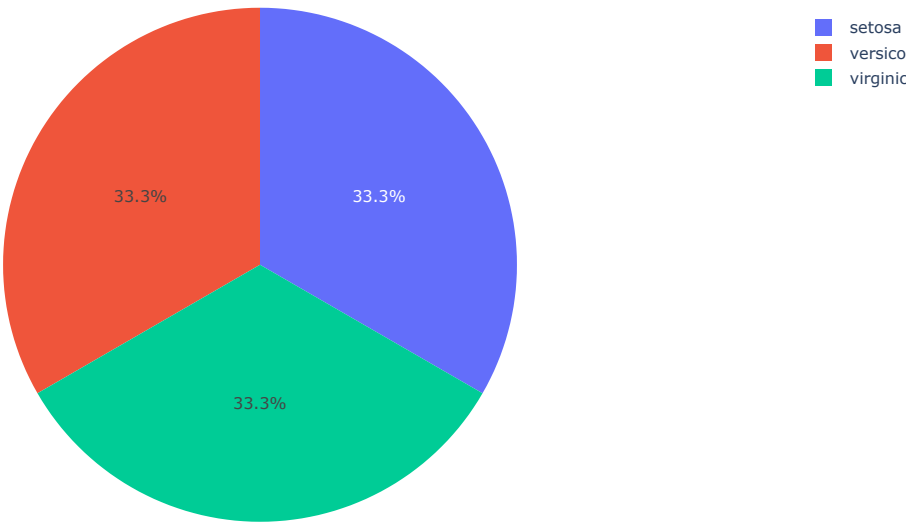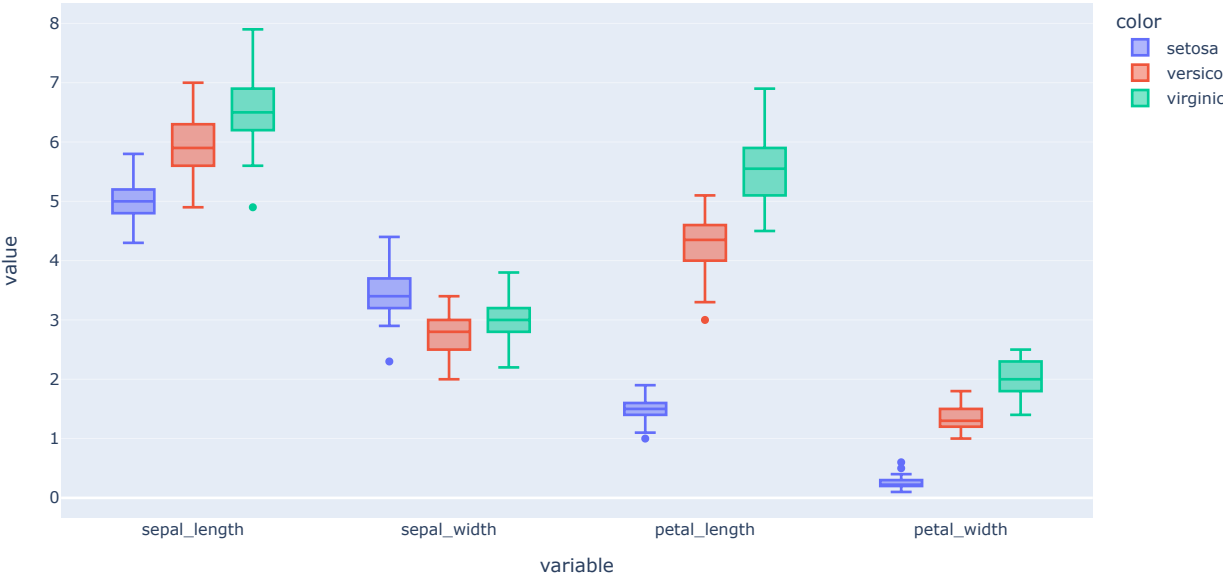
In [8]:

```
fig = pex.scatter(x=df['species'],y=df['sepal_width'],color=df['species'],size=df['petal_length'])
fig.show()
```


In [9]:

```
fig = pex.pie(values=df['species'].value_counts(),names=df['species'].value_counts().index)
fig.show()
```

In [10]:

```
fig = pex.box(df.drop(['species'],axis=1),color=df['species'])
fig.show()
```


In [11]:

```
fig = pex.violin(df.drop(['species'],axis=1))
fig.show()
```

In [12]:

```python
df1 = sns.load_dataset('tips')
df1
```

Out[12]:

|	total_bill	tip	sex	smoker	day	time	size
0	16.99	1.01	Female	No	Sun	Dinner	2
1	10.34	1.66	Male	No	Sun	Dinner	3
2	21.01	3.50	Male	No	Sun	Dinner	3
3	23.68	3.31	Male	No	Sun	Dinner	2
4	24.59	3.61	Female	No	Sun	Dinner	4
...	...	...	...	...	...	...	...
239	29.03	5.92	Male	No	Sat	Dinner	3
240	27.18	2.00	Female	Yes	Sat	Dinner	2
241	22.67	2.00	Male	Yes	Sat	Dinner	2
242	17.82	1.75	Male	No	Sat	Dinner	2
243	18.78	3.00	Female	No	Thur	Dinner	2

244 rows × 7 columns

In [13]:

```python
fig = pex.scatter(df1,x = 'tip',y='total_bill',color=df1['sex'],size=df1['size'],animation_frame=df1['size'])
fig.show()
```
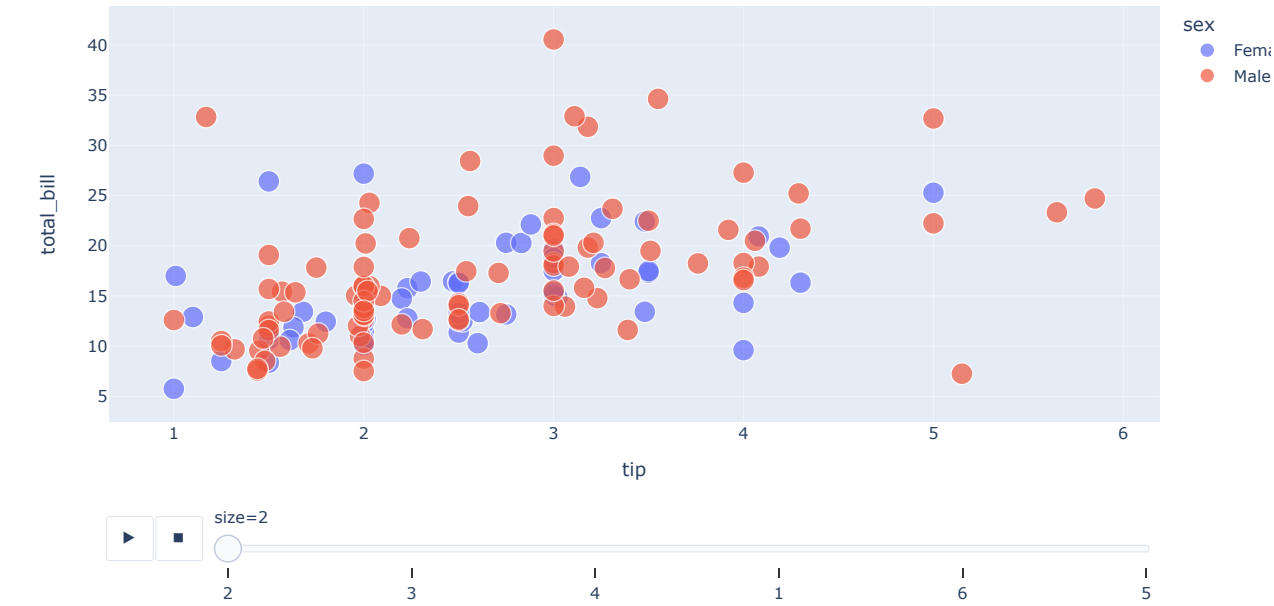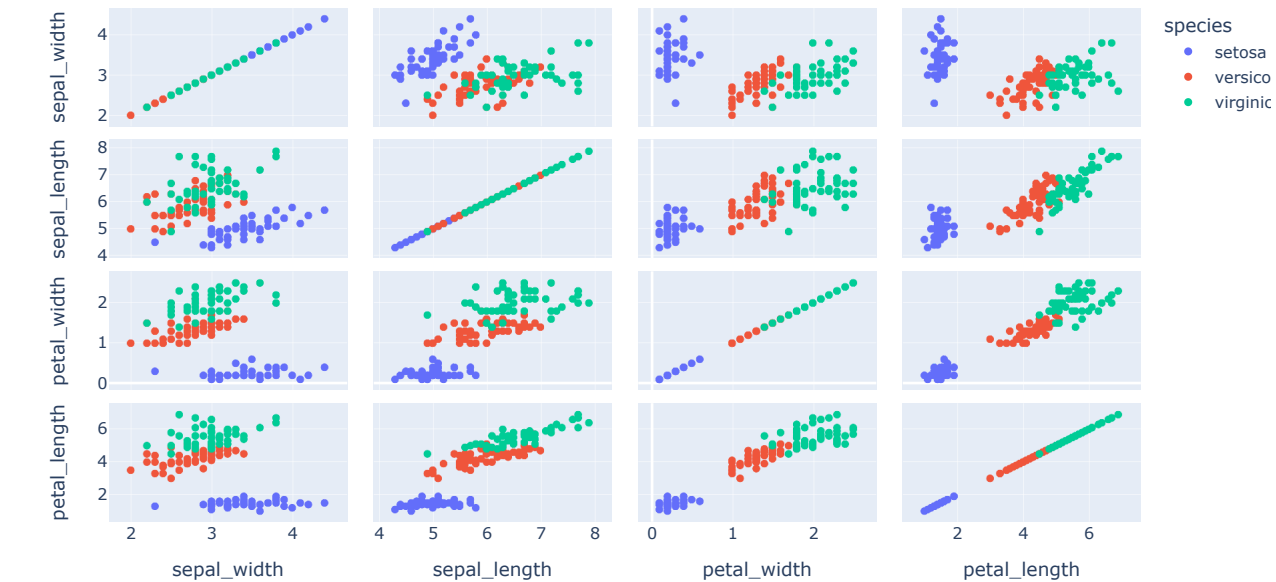
In [14]:

```python
fig = pex.histogram(df1,x='total_bill',y='tip',histfunc='sum',color='smoker',)
fig.show()
```
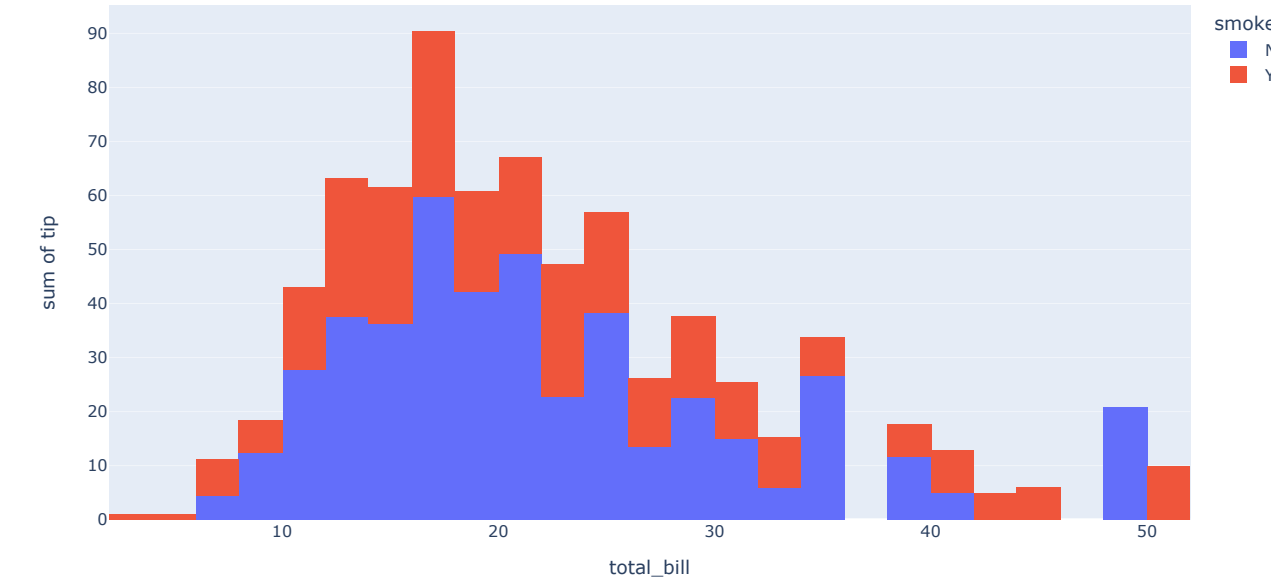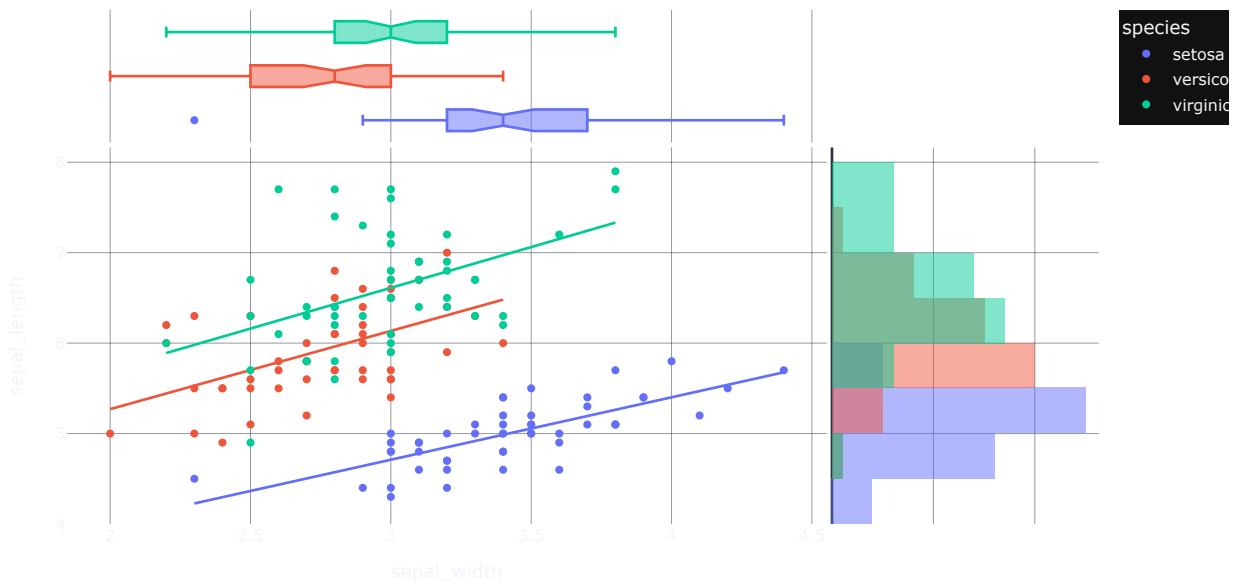

In [15]:

```python
fig = pex.scatter_matrix(df,dimensions=['sepal_width','sepal_length','petal_width','petal_length'],color='species')
fig.show()
```
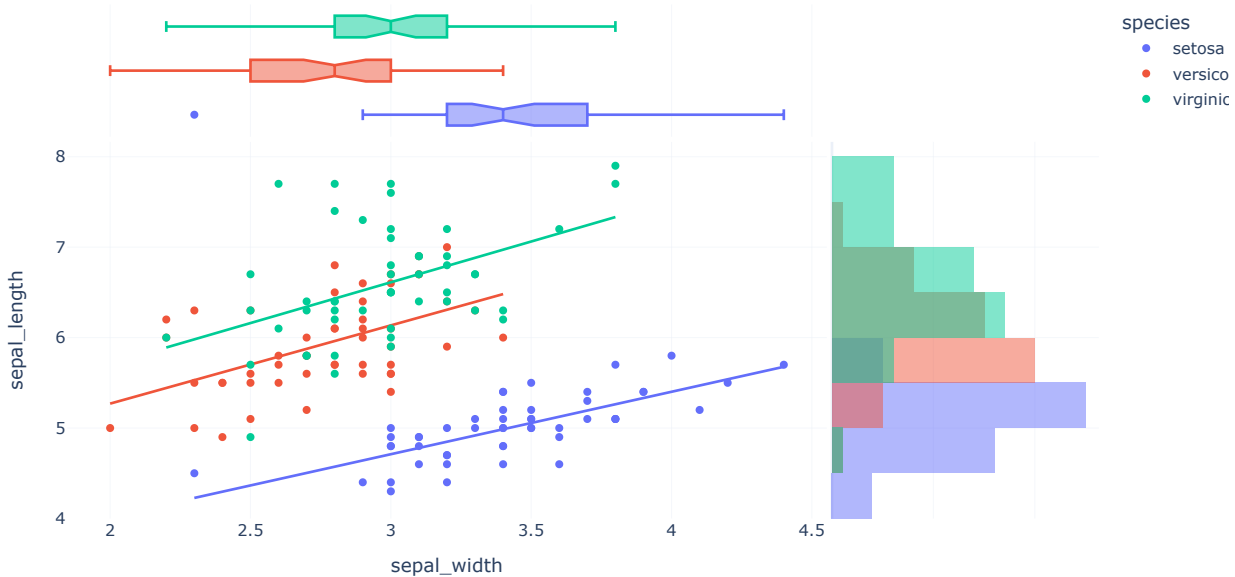
In [16]:

```
fig = pex.scatter(df,x='sepal_width',y='sepal_length',color='species',marginal_x='box',marginal_y='histogram',trendline='ols',template='p]
fig.show()
```
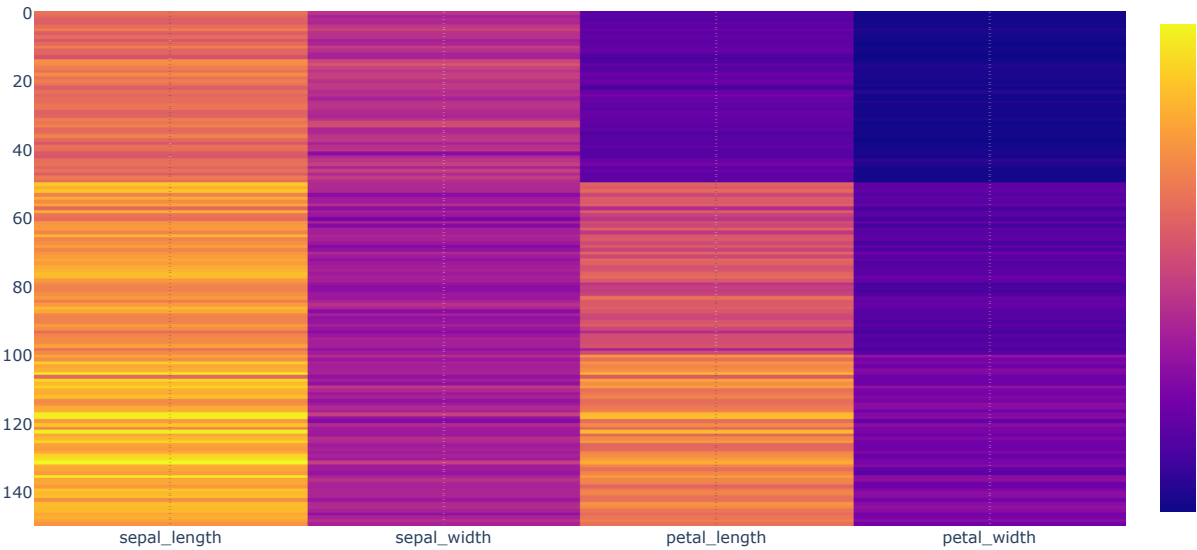

In [17]:

```
fig = pex.scatter(df,x='sepal_width',y='sepal_length',color='species',marginal_x='box',marginal_y='histogram',trendline='ols',template='p]
fig.show()# trendline='ols'
```

In [18]:

```python
#Heatmap
fig = pex.imshow(df.drop(['species'],axis=1),text_auto=True, aspect="auto")
fig.show()
```


In [ ]: