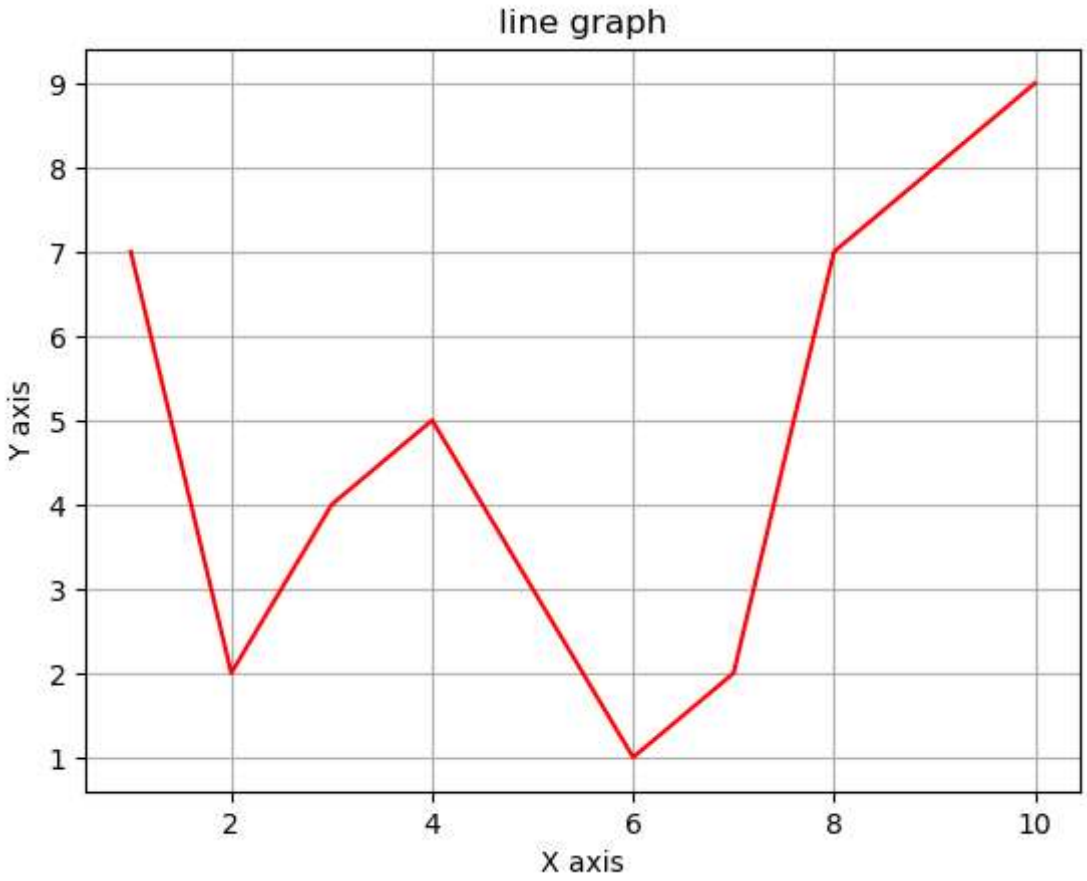
In [1]:
```
!pip install plotly
```

```
Defaulting to user installation because normal site-packages is not writeable
Requirement already satisfied: plotly in c:\programdata\anaconda3\lib\site-pa
ckages (5.9.0)
Requirement already satisfied: tenacity>=6.2.0 in c:\programdata\anaconda3\li
b\site-packages (from plotly) (8.0.1)
```

In [2]:
```
x = [1,2,3,4,5,6,7,8,9,10]
y = [7,2,4,5,3,1,2,7,8,9]
```

In [3]:
```
import matplotlib.pyplot as plt
```

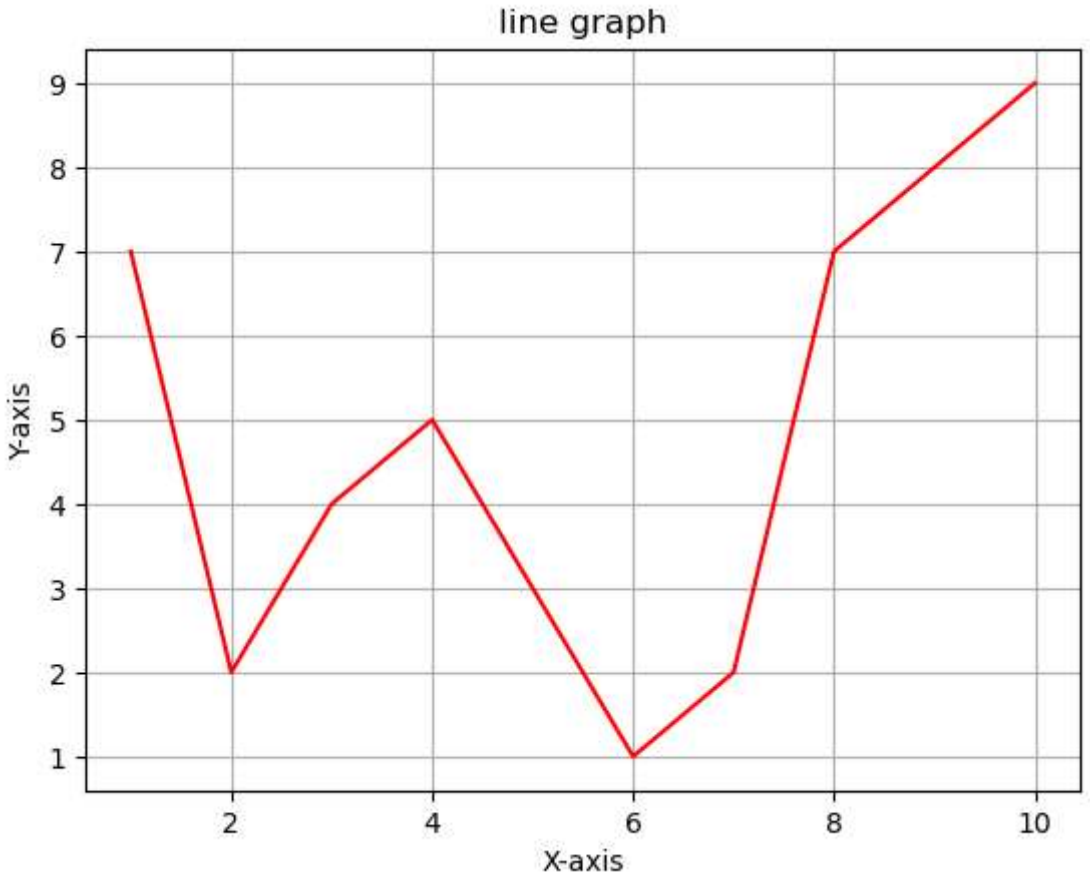
In [4]:
```
plt.plot(x,y,color="red")
plt.title("line graph")
plt.xlabel("X axis")
plt.ylabel("Y axis")
plt.grid()
plt.show()
```



In [5]:
```
import seaborn as sns
```

In [6]:
```
x = [1,2,3,4,5,6,7,8,9,10]
y = [7,2,4,5,3,1,2,7,8,9]
```

In [7]:
```
fig = sns.lineplot(x=x,y=y, color = "red")
fig.set(xlabel="X-axis", ylabel = "Y-axis")
fig.grid()
fig.set_title("line graph")
plt.show()
```



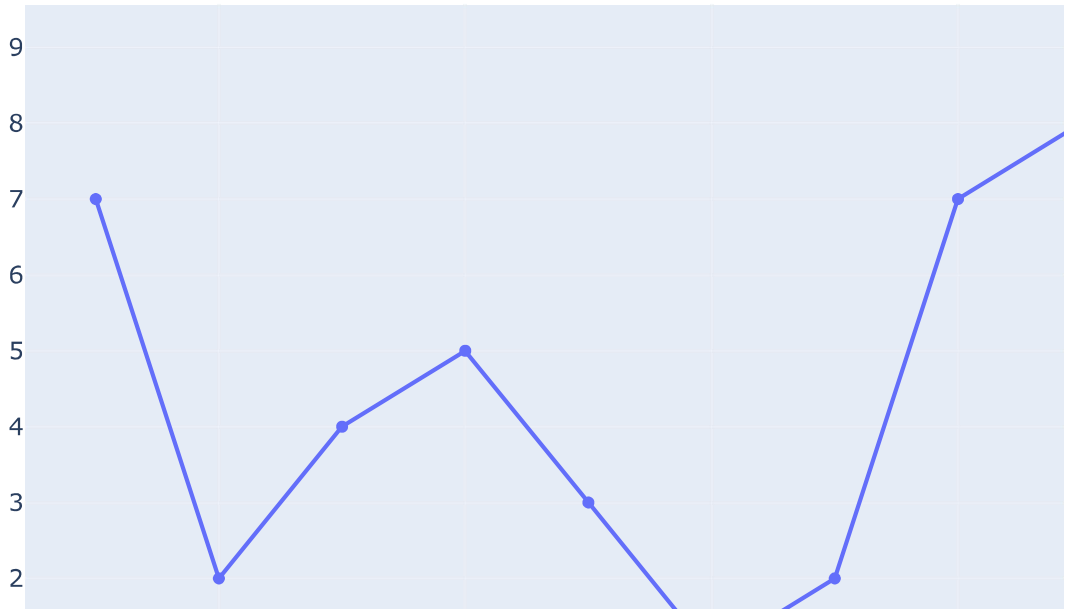
In [8]:
```
import plotly.express as px
```

In [9]:
```
fig = px.line(x=x,y=y, title = "line graph")
fig.show()
```

In [10]:
```
import plotly.graph_objects as go
```

In [11]:
```
fig = go.Figure(go.Scatter(x=x,y=y))
```

In [12]:
```
fig.show()
```



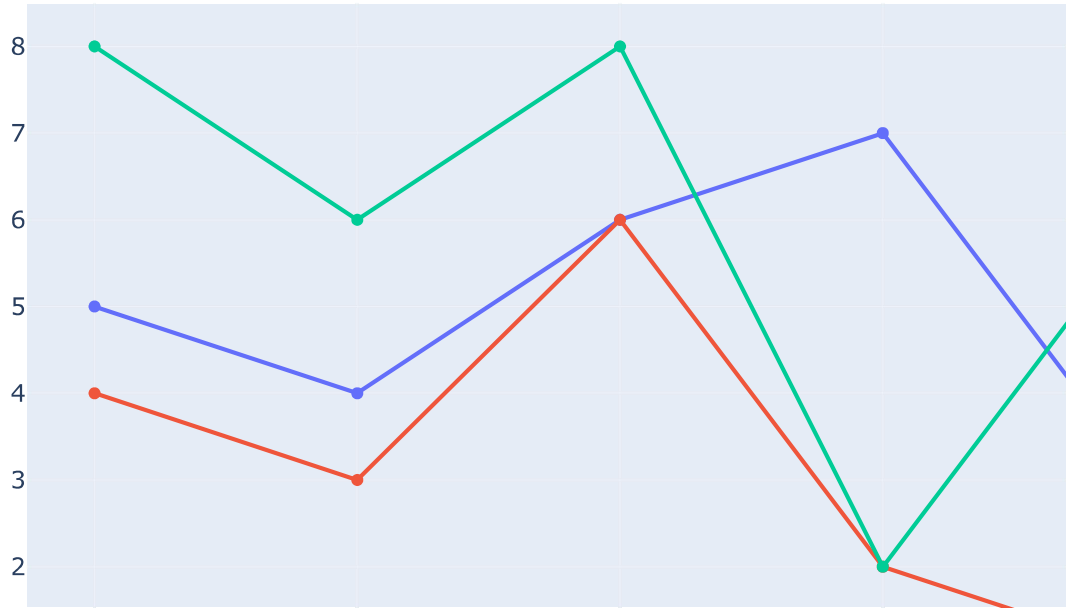
In [13]:
```
fig = go.Figure(go.Scatter(x=x,y=y))
fig.update_layout(title ="line graph", xaxis_title ="X-axis", yaxis_title="Y-ax
fig.show()
```

In [14]:
```
import plotly.graph_objects as go
```

In [15]:
```
x1,y1 = [1,2,3,4,5], [5,4,6,7,3]
x2,y2 = [1,2,3,4,5],[4,3,6,2,1]
x3,y3 = [1,2,3,4,5],[8,6,8,2,6]
```

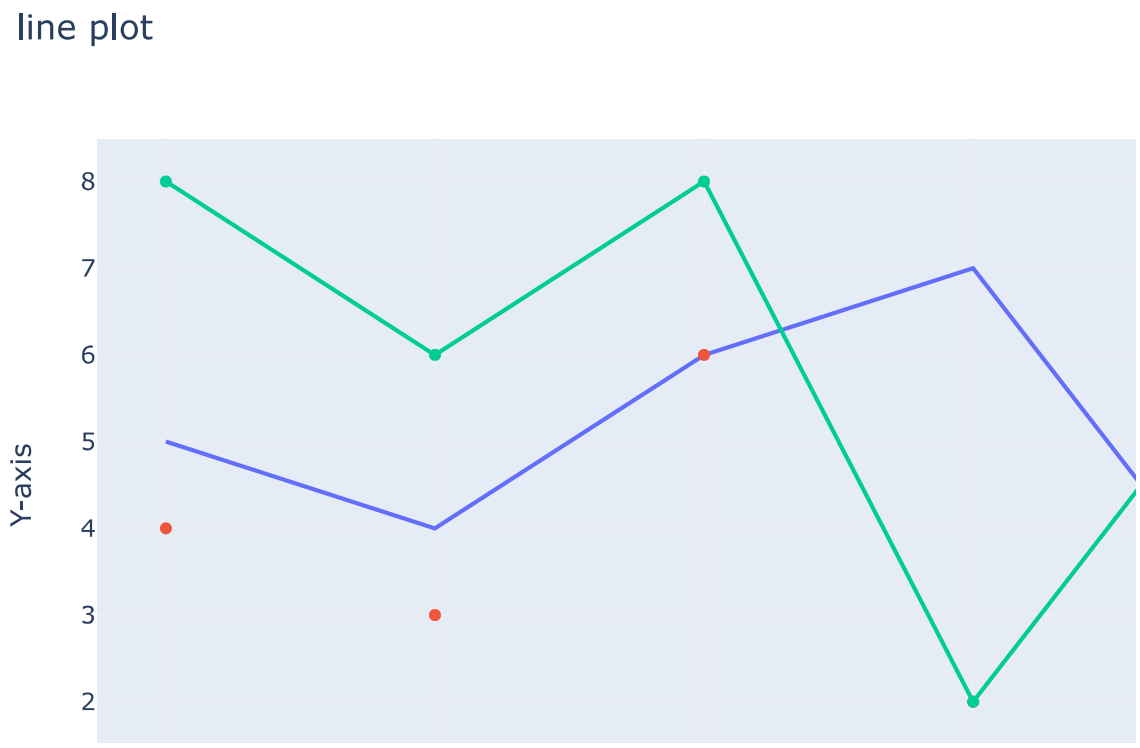
In [16]:
```
fig = go.Figure()
```

In [17]:
```
fig.add_trace(go.Scatter(x=x1,y=y1))
fig.add_trace(go.Scatter(x=x2,y=y2))
fig.add_trace(go.Scatter(x=x3,y=y3))
```



In [18]:
```
fig = go.Figure()
```

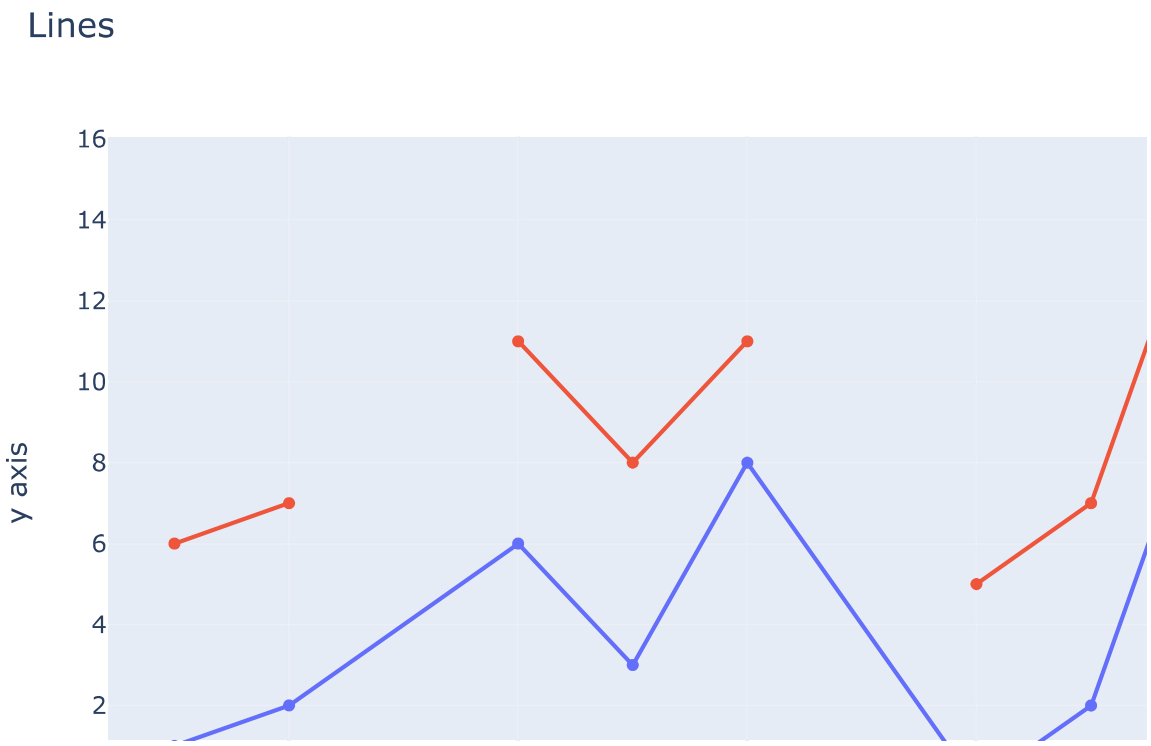
In [19]:
```
fig.add_trace(go.Scatter(x=x1,y=y1, name = "line1", mode = "lines"))
fig.add_trace(go.Scatter(x=x2,y=y2, name = 'line2', mode = "markers"))
fig.add_trace(go.Scatter(x=x3,y=y3, name = 'line3', mode= "lines+markers"))
fig.update_layout(title = "line plot", xaxis_title= "X-axis", yaxis_title="Y-ax
fig.show()
```



In [20]:
```
x = [1,2,3,4,5,6,7,8,9,10]
y = [1,2,None,6,3,8,None,0,2,10]
```

In [21]:
```
f = go.Figure()
```

In [22]:
```
f.add_trace(go.Scatter(x=x,y=y,name = "<b>No</b> Gaps", connectgaps = True))
f.add_trace(go.Scatter(x=x,y=[6,7,None,11,8,11,None,5,7,15], name = "Gaps"))
f.update_layout(title="Lines",xaxis_title ="x axis", yaxis_title="y axis")
f.show()
```



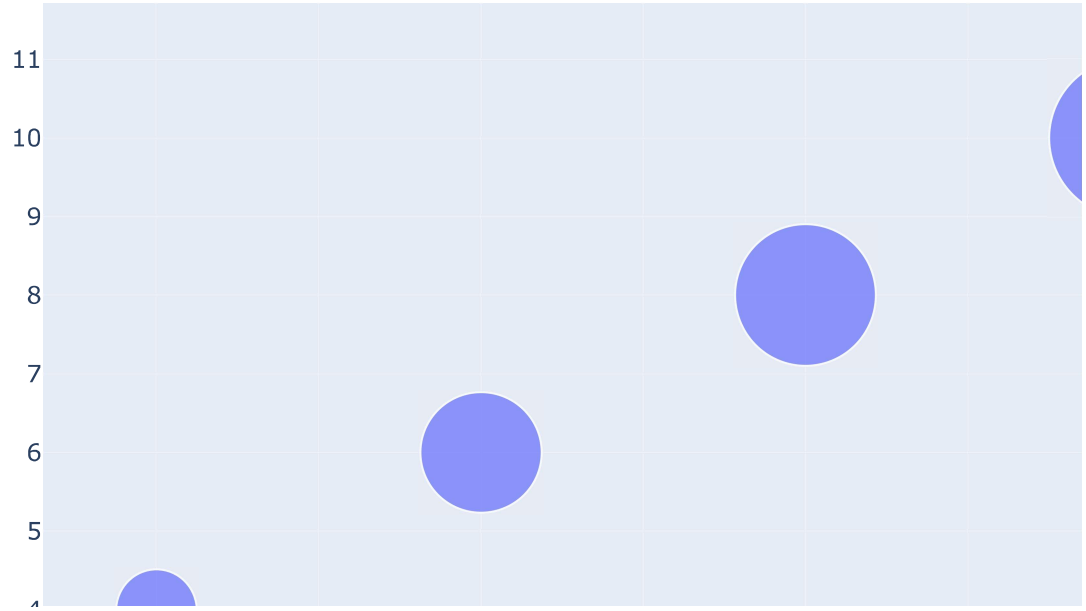
Bubble Charts

In [23]:
```
import plotly.graph_objects as go
```

In [24]:
```
x = [1,2,3,4]
y = [4,6,8,10]
```

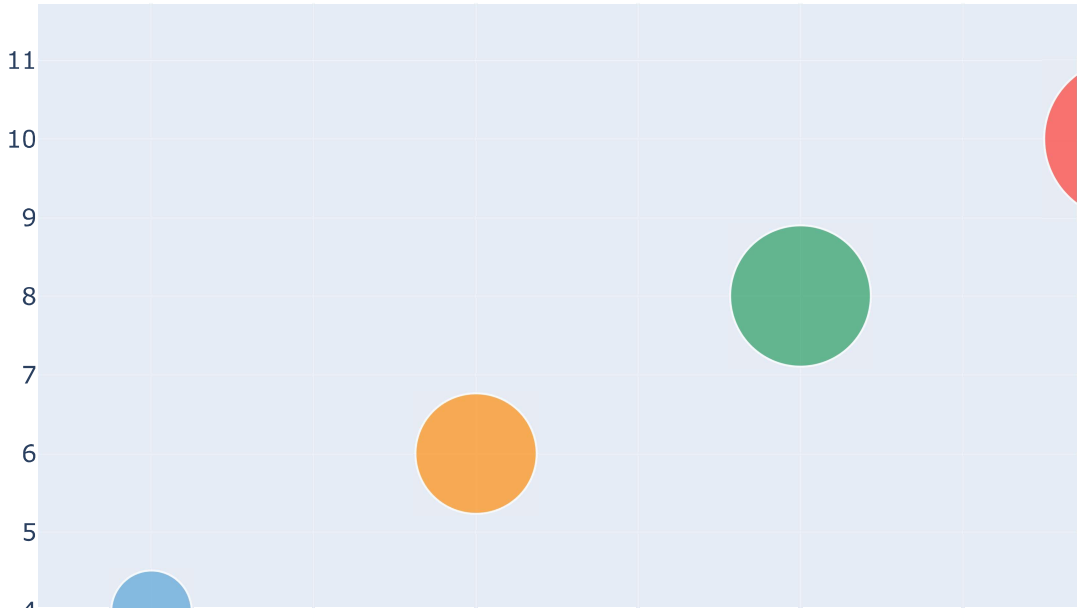
In [25]:
```
fig = go.Figure(go.Scatter(x=x,y=y,mode = "markers"))
fig.show()
```

In [26]:
```
fig = go.Figure(go.Scatter(x=x,y=y,mode = "markers", marker_size=[40,60,70,80])
fig.show()
```



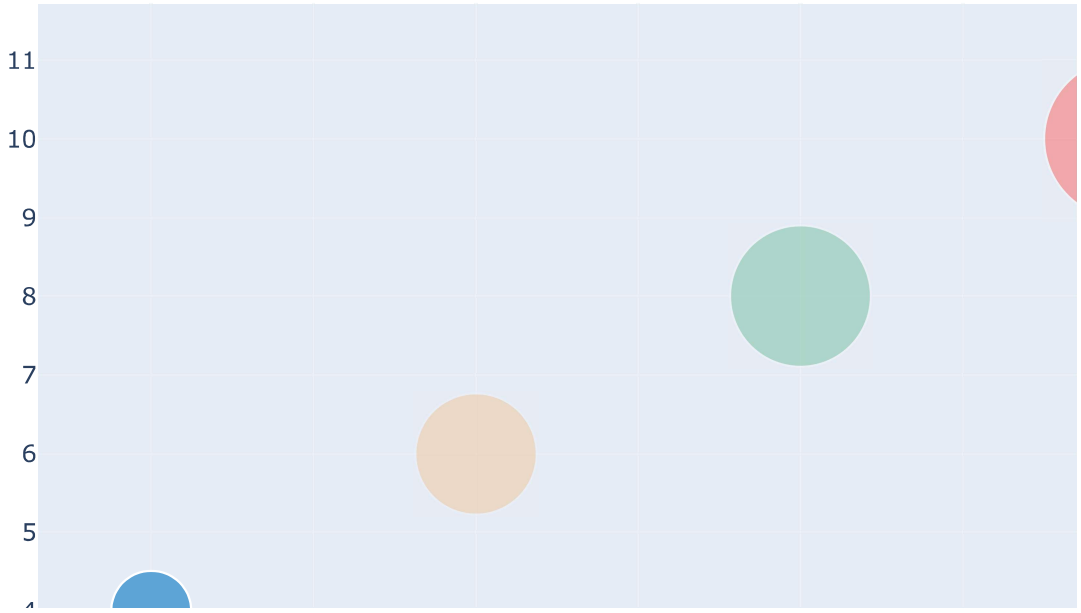
In [27]:
```
x = [1,2,3,4]
y = [4,6,8,10]
```

In [28]:
```
fig = go.Figure(go.Scatter(x=x,y=y,mode = "markers",
                    marker =dict(size=[40,60,70,80],color=['rgb(93,164,214)','r
                                                           'rgb(44,160,101)','r
fig.show()
```



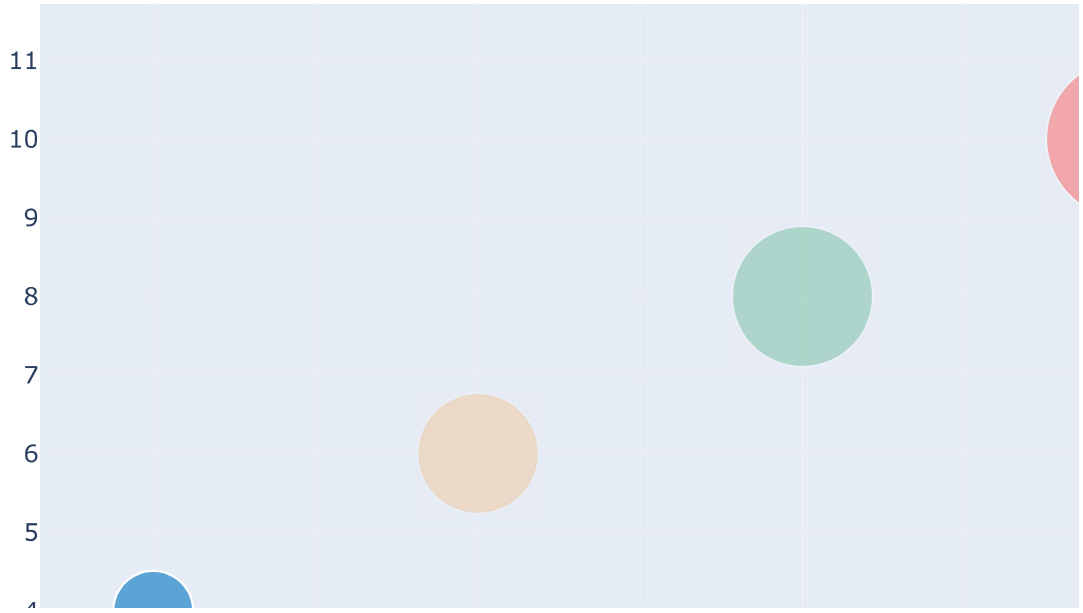
In [29]:
```
x = [1,2,3,4]
y = [4,6,8,10]
```

In [30]:
```
fig = go.Figure(go.Scatter(x=x,y=y,mode = "markers",
        marker =dict(size=[40,60,70,80],color=['rgb(93,164,214)','rgb(255,144,1
                                               'rgb(44,160,101)','rgb(255,64,54
                     opacity = [1,0.2,0.3,0.4])))
fig.show()
```



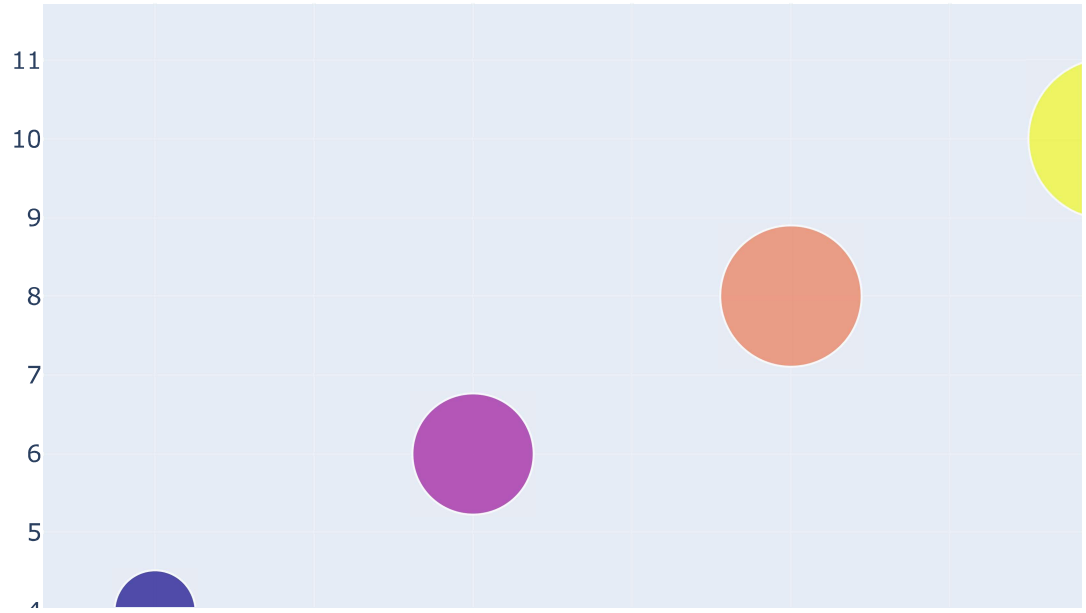
In [31]:
```
x = [1,2,3,4]
y = [4,6,8,10]
```

In [32]:
```
fig = go.Figure(go.Scatter(x=x,y=y,text = ["Product A", "Product B", "Product C
                           mode = "markers",
        marker =dict(size=[40,60,70,80],
     color=['rgb(93,164,214)','rgb(255,144,14)','rgb(44,160,101)','rgb(255,64,5
                    opacity = [1,0.2,0.3,0.4])))
fig.show()
```



showing color scale

In [33]:
```
fig = go.Figure(go.Scatter(x=x,y=y,text = ["Product A", "Product B", "Product C
                           mode = "markers",
        marker =dict(size=[40,60,70,80],color=[10,12,14,16],
                     showscale=True)))
fig.show()
```



In [ ]:
```

```