In [8]:

```
import os
import pandas as pd
import plotly.plotly as py
import cufflinks as cf
import plotly.graph_objs as go
from plotly.offline import download_plotlyjs, init_notebook_mode, plot, iplot
os.chdir("/Users/sayali/Desktop")

df17 = pd.read_csv("yob2017.csv")
df16 = pd.read_csv("yob2016.csv")
df15 = pd.read_csv("yob2015.csv")
df14 = pd.read_csv("yob2014.csv")
df11 = pd.read_csv("yob2011.csv")
df10 = pd.read_csv("yob2010.csv")
# Top 5 most frequently used baby names from 2010-2017
print("\nTop 5 most frequently used baby names from 2010-2017\n")
print(df10.head(5))
print(df11.head(5))
print(df14.head(5))
print(df15.head(5))
print(df16.head(5))
print(df17.head(5))
trace1 = go.Scatter(
    x=[2010, 2011, 2014, 2015, 2016, 2017],
    y=[22905, 21837, 20924, 20435, 19471, 19738]
)

data = [trace1]

layout = go.Layout(
    showlegend=False,
    annotations=[
        dict(x=2010,y=df10.Number[0],xref='x',yref='y', text=df10.Name[0],ax=0,
ay=-40),
        dict(x=2011,y=df11.Number[0],xref='x',yref='y', text=df11.Name[0],ax=0,
ay=-40),
        dict(x=2014,y=df14.Number[0],xref='x',yref='y', text=df14.Name[0],ax=0,
ay=-40),
        dict(x=2015,y=df15.Number[0],xref='x',yref='y', text=df15.Name[0],ax=0,
ay=-40),
        dict(x=2016,y=df16.Number[0],xref='x',yref='y', text=df16.Name[0],ax=0,
ay=-40),
        dict(x=2017,y=df17.Number[0],xref='x',yref='y', text=df17.Name[0],ax=0,
ay=-40)
    ]
)
# Plotting graph of top 1 baby name from 2010 to 2017 data
# year on x-axis and number of occurances of baby name on y-axis
# Trending baby names from 2010 to 2017 dataset
index10=df10['Number'].idxmax(axis=0, skipna=True)
```

```
index11=df11['Number'].idxmax(axis=0, skipna=True)

index14=df14['Number'].idxmax(axis=0, skipna=True)
index15=df15['Number'].idxmax(axis=0, skipna=True)
index16=df16['Number'].idxmax(axis=0, skipna=True)
index17=df17['Number'].idxmax(axis=0, skipna=True)

top_names=[]
top_names.append([df10.loc[index10].Name,df10.loc[index10].Number])
top_names.append([df11.loc[index11].Name,df11.loc[index11].Number])
top_names.append([df14.loc[index14].Name,df14.loc[index14].Number])
top_names.append([df15.loc[index15].Name,df15.loc[index15].Number])
top_names.append([df16.loc[index16].Name,df16.loc[index16].Number])
top_names.append([df17.loc[index17].Name,df17.loc[index17].Number])

new_df = pd.DataFrame(top_names,columns=["Name","Number"])
index=new_df['Number'].idxmax(axis=0, skipna=True)


print("\nMost popular baby name from 2010-2017 dataset: ", new_df.loc[index]['Na
me'])


fig = go.Figure(data=data, layout=layout)
plot(fig, filename='multiple-annotation')
```

Top 5 most frequently used baby names from 2010-2017

	Name	Sex	Number
0	Isabella	F	22905
1	Sophia	F	20639
2	Emma	F	17338
3	Olivia	F	17022
4	Ava	F	15429

	Name	Sex	Number
0	Sophia	F	21837
1	Isabella	F	19901
2	Emma	F	18797
3	Olivia	F	17321
4	Ava	F	15496

	Name	Sex	Number
0	Emma	F	20924
1	Olivia	F	19791
2	Sophia	F	18598
3	Isabella	F	17068
4	Ava	F	15688

	Name	Sex	Number
0	Emma	F	20435
1	Olivia	F	19669
2	Sophia	F	17402
3	Ava	F	16361
4	Isabella	F	15594

	Name	Sex	Number
0	Emma	F	19471
1	Olivia	F	19327
2	Ava	F	16283
3	Sophia	F	16112
4	Isabella	F	14772

	Name	Sex	Number
0	Emma	F	19738
1	Olivia	F	18632
2	Ava	F	15902
3	Isabella	F	15100
4	Sophia	F	14831

Most popular baby name from 2010-2017 dataset: Isabella

/anaconda3/lib/python3.7/site-packages/plotly/offline/offline.py:466
: UserWarning:

Your filename `multiple-annotation` didn't end with .html. Adding .h
tml to the end of your file.

Out[8]:

'file:///Users/sayali/Desktop/multiple-annotation.html'

In [ ]: