

## Code

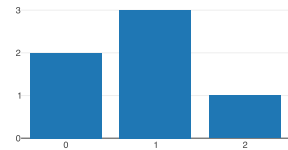
## JSON Specification

## Display

(a) 

```
>>> import plotly.graph_objs as go
>>> fig = go.FigureWidget(
    data=[go.Bar(y=[2, 3, 1])])
```

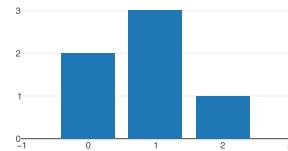
```
{'data': [
  {'type': 'bar',
   'y': [2, 3, 1]},
  {'layout': {}}
```



(b) 

```
>>> fig.layout.xaxis.range = [-1, 3]
```

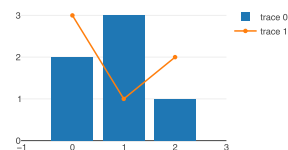
```
{'data': [
  {'type': 'bar',
   'y': [2, 3, 1]},
  {'layout': {'xaxis':
    {'range': [-1, 3]}}}]
```



(c) 

```
>>> fig.add_scatter(y=[3, 1, 2])
```

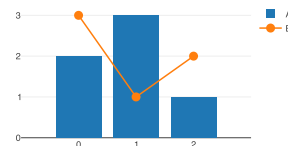
```
{'data': [
  {'type': 'bar',
   'y': [2, 3, 1]},
  {'type': 'scatter',
   'y': [3, 1, 2]},
  {'layout': {'xaxis':
    {'range': [-1, 3]}}}]
```



(d) 

```
>>> with fig.batch_update():
...     fig.data[0].name = 'A'
...     fig.data[1].name = 'B'
...     fig.data[1].marker.size = 12
...     fig.layout.xaxis.tickvals = \
...         [0, 1, 2]
```

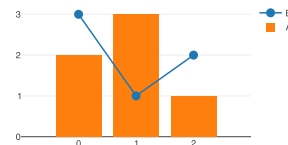
```
{'data': [
  {'type': 'bar',
   'y': [2, 3, 1],
   'name': 'A'},
  {'type': 'scatter',
   'y': [3, 1, 2],
   'name': 'B',
   'marker': {'size': 12}},
  {'layout': {'xaxis':
    {'range': [-1, 3],
     'tickvals': [0, 1, 2]}}}]
```



(e) 

```
>>> fig.data = \
...     [fig.data[1], fig.data[0]]
```

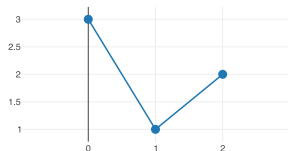
```
{'data': [
  {'type': 'scatter', ...},
  {'type': 'bar', ...}],
  {'layout': {'xaxis':
    {'range': [-1, 3],
     'tickvals': [0, 1, 2]}}}]
```



(f) 

```
>>> fig.data = [fig.data[0]]
```

```
{'data': [
  {'type': 'scatter', ...}],
  {'layout': {'xaxis':
    {'range': [-1, 3],
     'tickvals': [0, 1, 2]}}}]
```



(g) 

```
>>> with fig.batch_animate():
...     fig.layout.xaxis.range = \
...         [-2, 4]
...     fig.layout.yaxis.range = \
...         [-3, 5]
```

```
{'data': [
  {'type': 'scatter', ...}],
  {'layout': {'xaxis':
    {'range': [-1, 3],
     'tickvals': [0, 1, 2]},
   'yaxis':
    {'range': [-3, 5]}}}]
```

