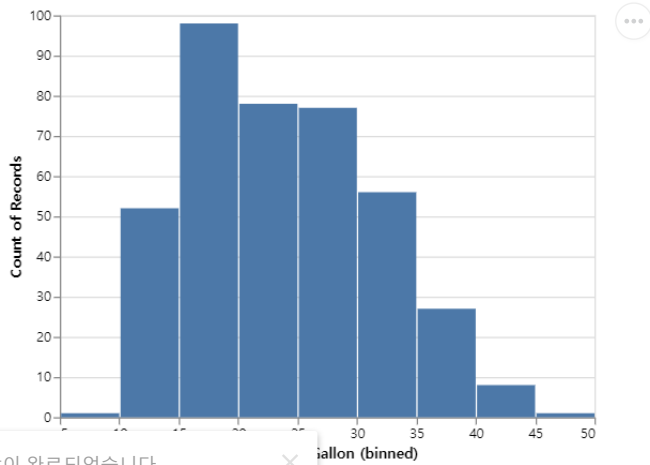


```
# Visualization: Histogram in Altair
```

```
# load an example dataset
from vega_datasets import data
cars = data.cars()

# plot the dataset, referencing dataframe column names
import altair as alt
alt.Chart(cars).mark_bar().encode(
    x=alt.X('Miles_per_Gallon', bin=True),
    y='count()',
)
```



저장이 완료되었습니다.

```
# Visualization: Linked Brushing in Altair
```

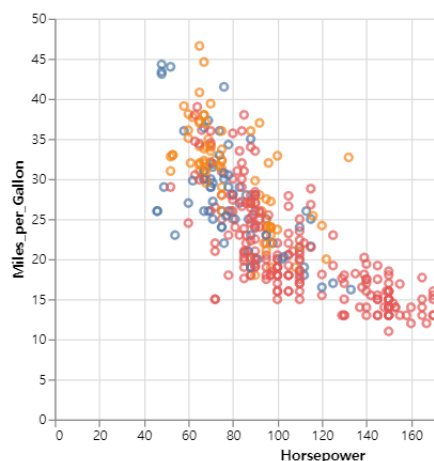
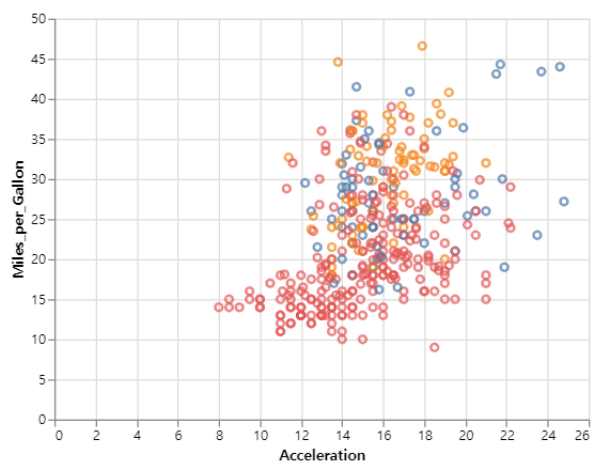
```
# load an example dataset
from vega_datasets import data
cars = data.cars()

import altair as alt

interval = alt.selection_interval()

base = alt.Chart(cars).mark_point().encode(
    y='Miles_per_Gallon',
    color=alt.condition(interval, 'Origin', alt.value('lightgray'))
).properties(
    selection=interval
)

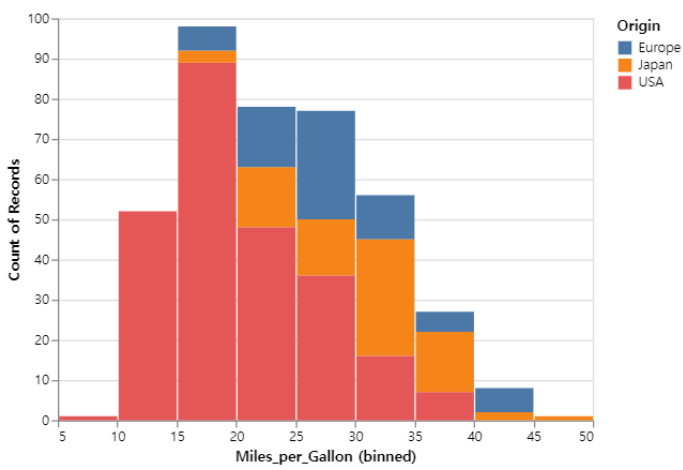
base.encode(x='Acceleration') | base.encode(x='Horsepower')
```



```
# Visualization: Stacked Histogram in Altair
```

```
# load an example dataset
from vega_datasets import data
cars = data.cars()

# plot the dataset, referencing dataframe column names
import altair as alt
alt.Chart(cars).mark_bar().encode(
    x=alt.X('Miles_per_Gallon', bin=True),
    y='count()',
    color='Origin'
)
```

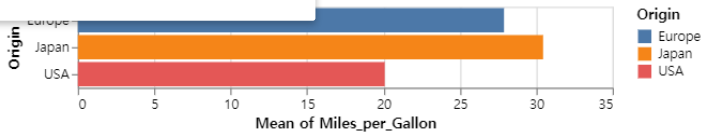


Visualization: Bar Plot in Altair

```
# load an example dataset
from vega_datasets import data
cars = data.cars()
```

```
# plot the dataset, referencing dataframe column names
import altair as alt
alt.Chart(cars).mark_bar().encode(
    x='mean(Miles_per_Gallon)',
    y='Origin',
    color='Origin'
```

저장이 완료되었습니다.



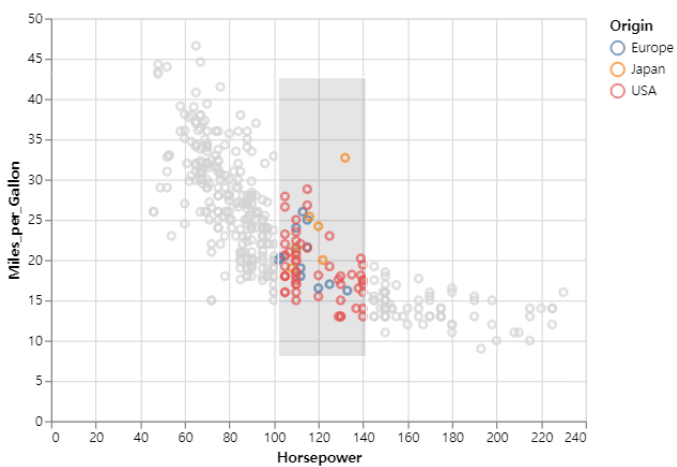
Visualization: Interactive Brushing in Altair

```
# load an example dataset
from vega_datasets import data
cars = data.cars()
```

```
import altair as alt
```

```
interval = alt.selection_interval()
```

```
alt.Chart(cars).mark_point().encode(
    x='Horsepower',
    y='Miles_per_Gallon',
    color=alt.condition(interval, 'Origin', alt.value('lightgray'))
).properties(
    selection=interval
)
```

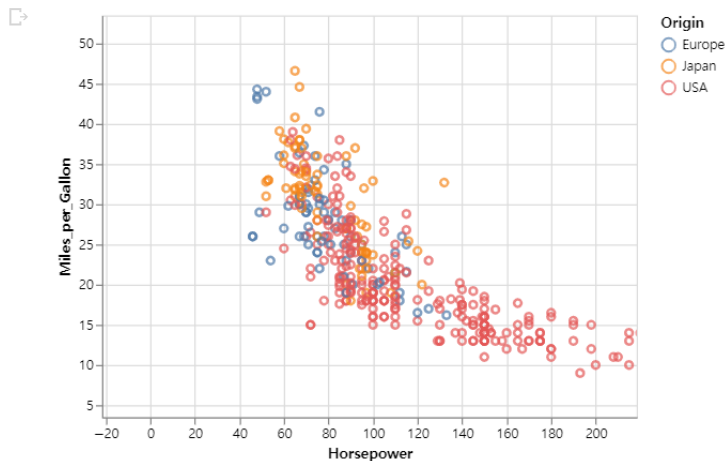


Visualization: Interactive Scatter Plot in Altair

```
# load an example dataset
from vega_datasets import data
cars = data.cars()
```

```
# plot the dataset, referencing dataframe column names
import altair as alt
alt.Chart(cars).mark_point().encode(
    x='Horsepower',
```

```
y='Miles_per_Gallon',
color='Origin'
).interactive()
```

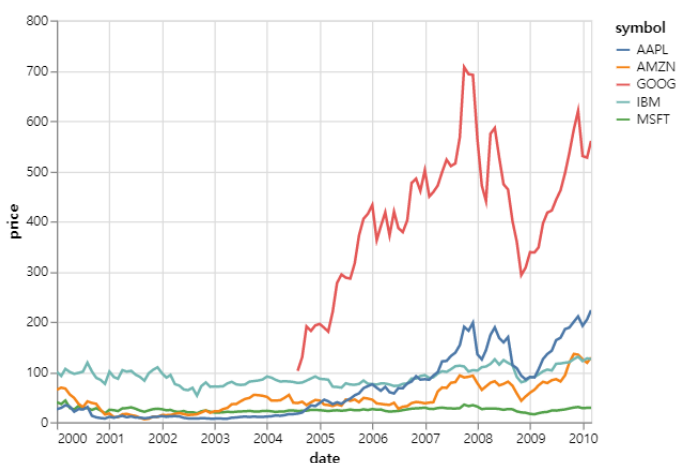


```
# Visualization: Time Series Line Plot in Altair
```

```
from vega_datasets import data
stocks = data.stocks()

import altair as alt
alt.Chart(stocks).mark_line().encode(
    x='date',
    y='price'
).interactive(bind_y=False)
```

저장이 완료되었습니다.



```
# Visualization: Scatter Plot with Rolling Mean in Altair
```

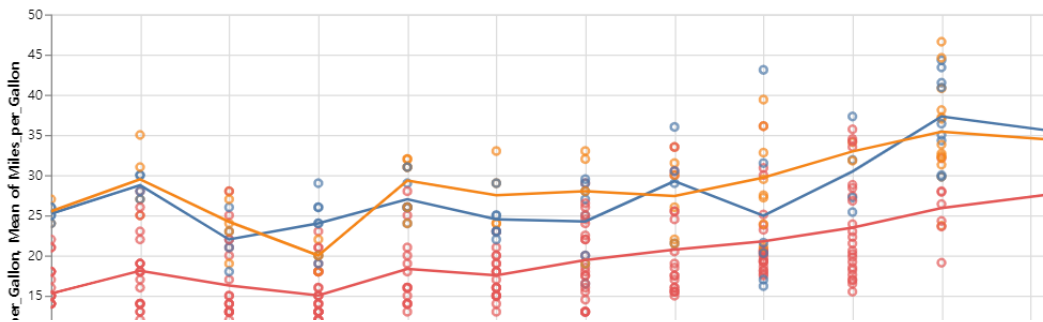
```
# load an example dataset
from vega_datasets import data
cars = data.cars()

import altair as alt

points = alt.Chart(cars).mark_point().encode(
    x='Year:T',
    y='Miles_per_Gallon',
    color='Origin'
).properties(
    width=800
)

lines = alt.Chart(cars).mark_line().encode(
    x='Year:T',
    y='mean(Miles_per_Gallon)',
    color='Origin'
).properties(
    width=800
).interactive(bind_y=False)

points + lines
```



Visualization: Linked Scatter-Plot and Histogram in Altair

```
# load an example dataset
from vega_datasets import data
cars = data.cars()

import altair as alt

interval = alt.selection_interval()

points = alt.Chart(cars).mark_point().encode(
    x='Horsepower',
    y='Miles_per_Gallon',
    color=alt.condition(interval, 'Origin', alt.value('lightgray'))
).properties(
    selection=interval
)
```

저장이 완료되었습니다.

encode(

```
y= 'Origin' ,
color='Origin'
).transform_filter(interval)
```

points & histogram

