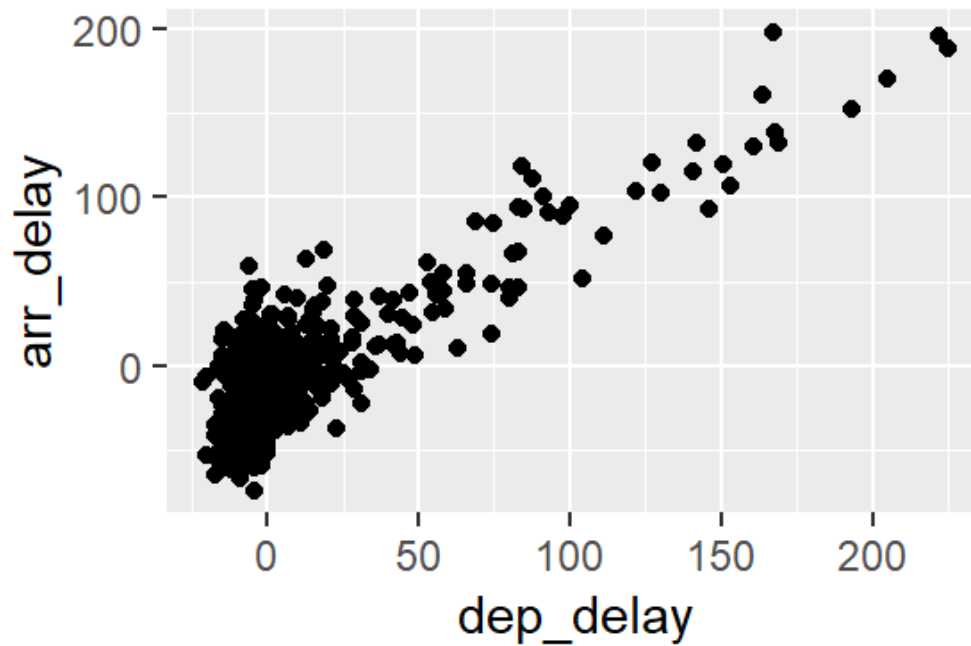


package

ggplot2

```
ggplot(data = flight_sub, aes(x = dep_delay, y = arr_delay)) +  
  geom_point()
```



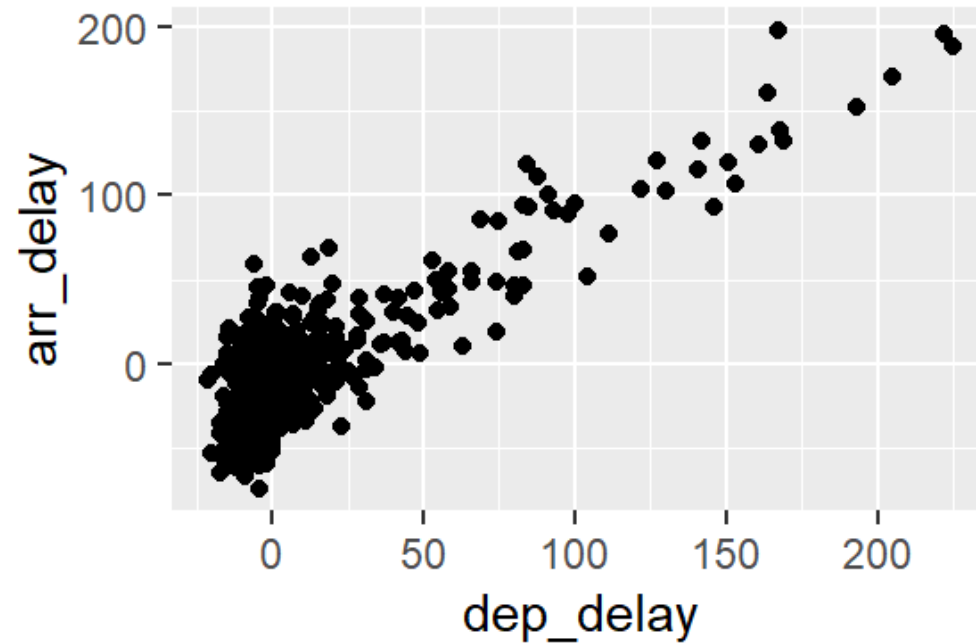
Function

Data frame

Which variables to plot

```
ggplot(data = flight_sub, aes(x = dep_delay, y = arr_delay)) +  
  geom_point()
```

What kind of graph to make



Function

Data frame

Which variables to plot

```
ggplot(data = weather, aes(x = temp)) +  
  geom_histogram()
```

What kind of graph to make

```
ggplot(data = weather, aes(x = temp)) +  
  geom_histogram(binwidth = 20, color = "tomato", fill = "tan")
```

Other graphical details

TABLE 3.5: Summary of 5NG

	Named graph	Shows	Geometric object	Notes
1	Scatterplot	Relationship between 2 numerical variables	<code>geom_point()</code>	★
2	Linegraph	Relationship between 2 numerical variables	<code>geom_line()</code>	Used when there is a sequential order to x-variable e.g. time
3	Histogram	Distribution of 1 numerical variable	<code>geom_histogram()</code>	★ Facetted histogram shows distribution of 1 numerical variable split by 1 categorical variable
4	Boxplot	Distribution of 1 numerical variable split by 1 categorical variable	<code>geom_boxplot()</code>	★ To graph without splitting by a categorical variable add <code>x = NULL</code>
5	Barplot	Distribution of 1 categorical variable	<code>geom_bar()</code> when counts are not pre-counted	★ Stacked & dodged barplots show distribution of 2 categorical variables
			<code>geom_col()</code> when counts are pre-counted	