Graphics

Marika Olijar

11/19/2020

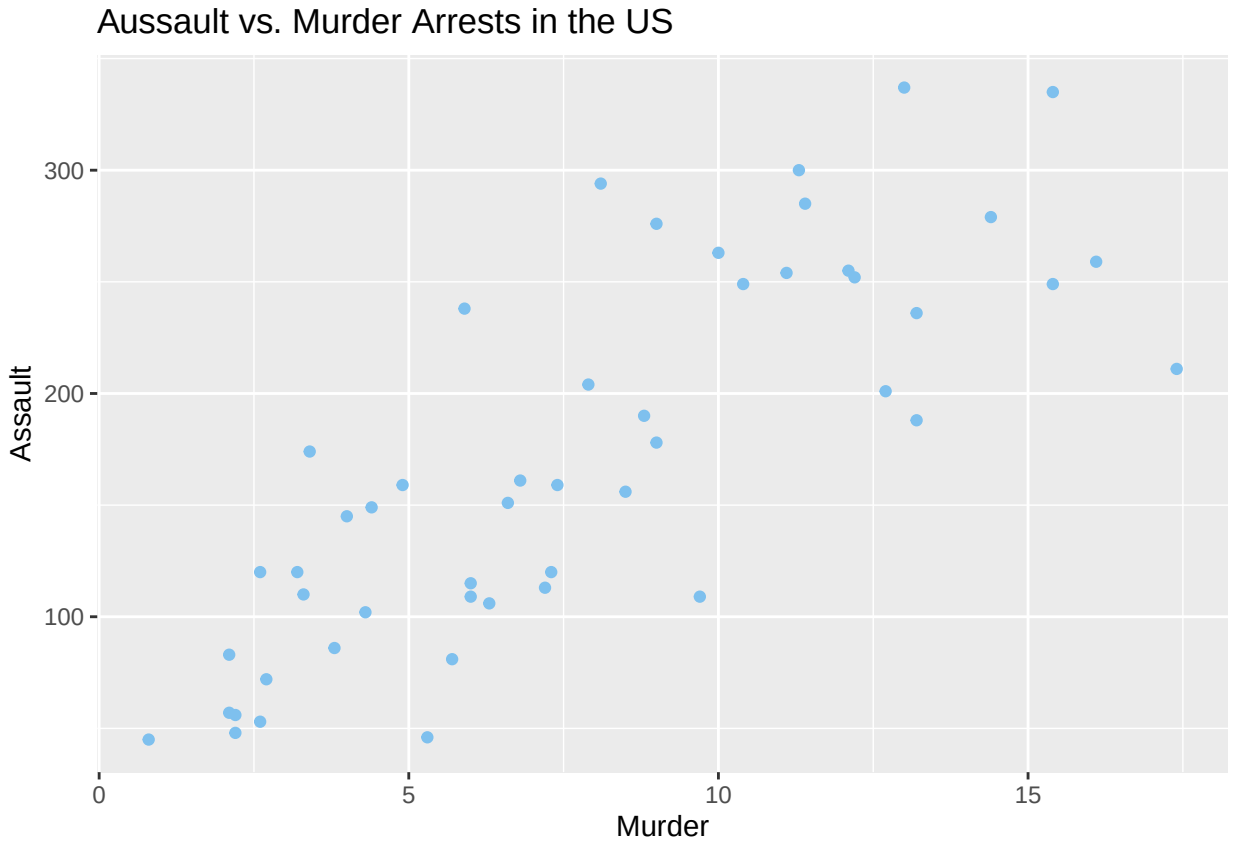
Create the following graphs in `ggplot2`.

1. Check out the base R built-in dataset, `data("USArrests")`.

```
data("USArrests")
```

2. Create a scatterplot that looks at the correlation between murder and assault arrests. Label the x and y axes and title the graph.

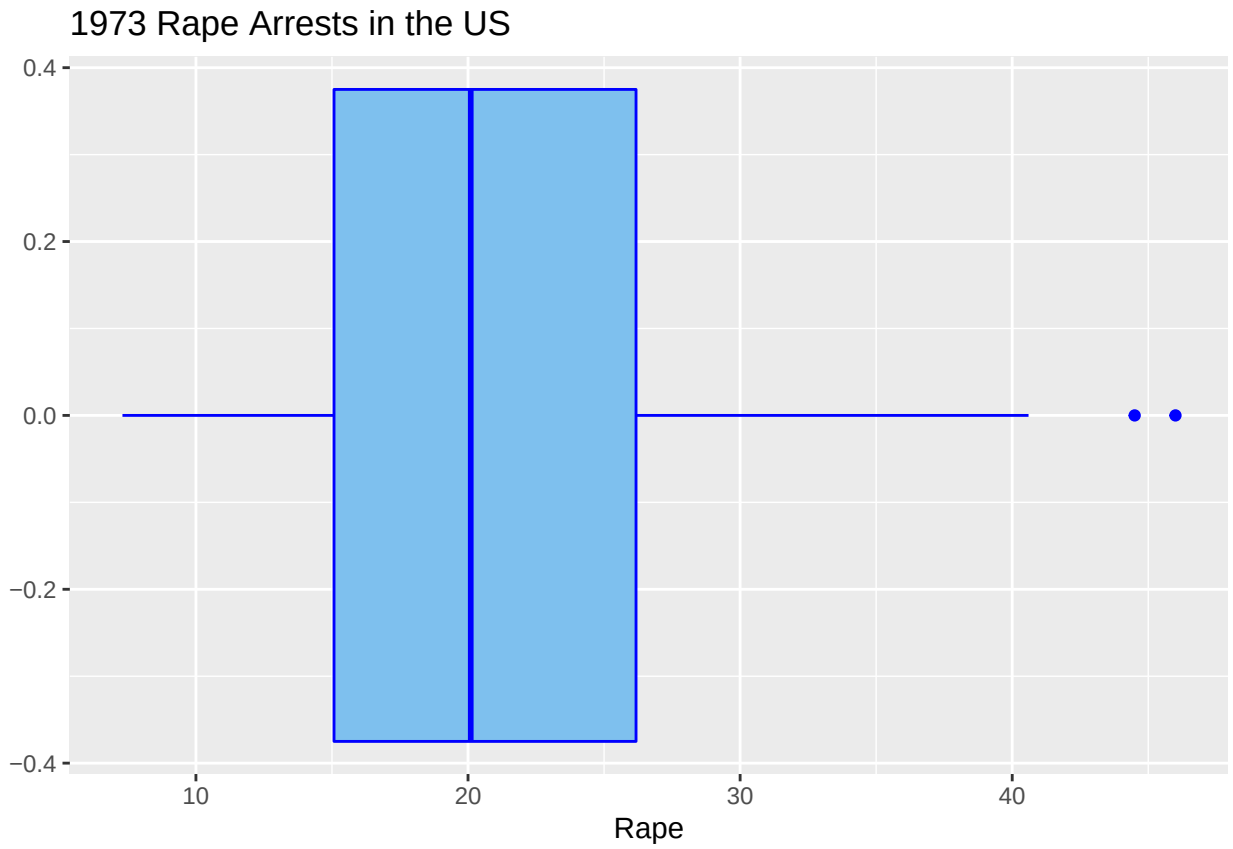
```
ggplot(USArrests) +
  aes(x = Murder, y = Assault) +
   labs(title = "Aussault vs. Murder Arrests in the US") +
  geom_point(colour = "skyblue2")
```



3. Create a boxplot of rape arrests. Label the plot.

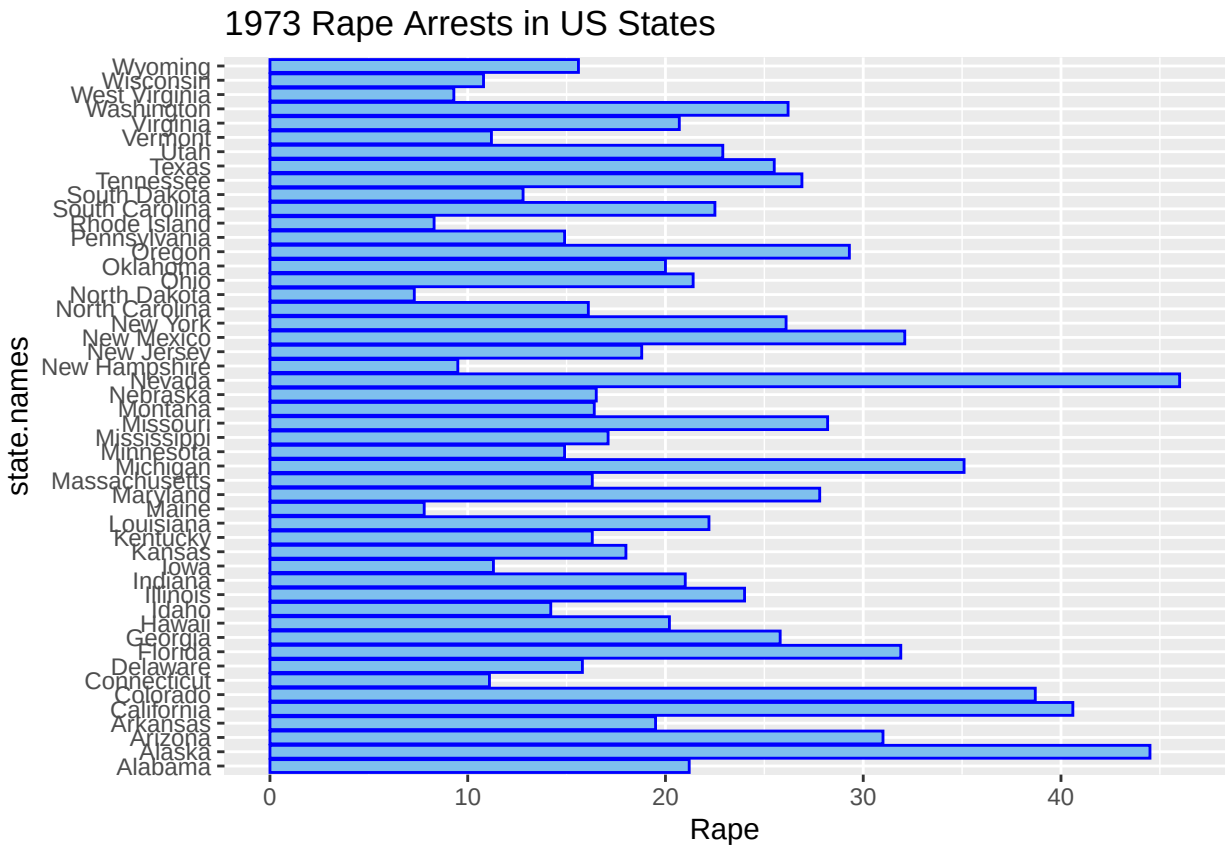
```
ggplot(USArrests) +
  labs(title = "1973 Rape Arrests in the US") +
```

```
  aes(Rape,) +
  geom_boxplot(fill = "skyblue2", colour = "blue")
```



4. Create a barplot of the number of rape arrests per state.

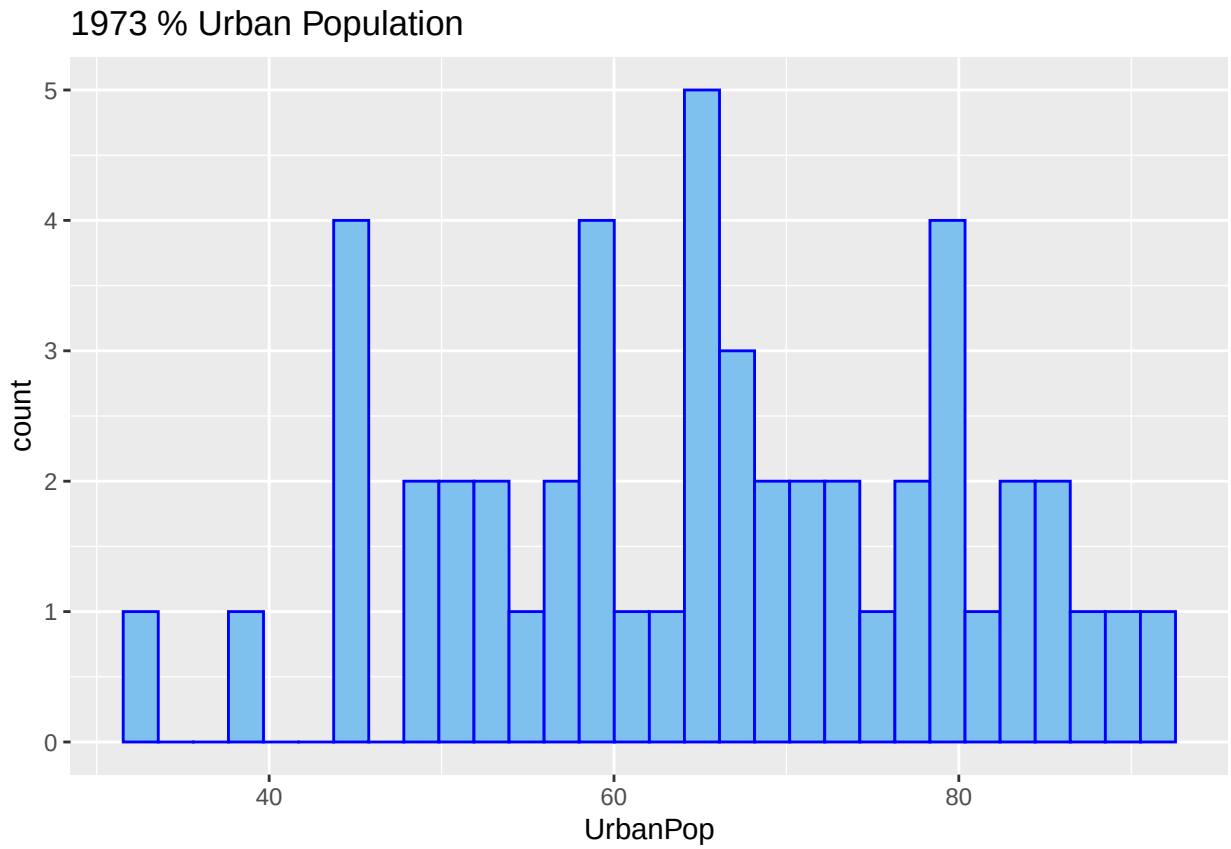
```
state.names = row.names(USArrests)
ggplot(USArrests) +
  aes(Rape, state.names) +
  labs(title = "1973 Rape Arrests in US States") +
  geom_bar(stat='identity', fill = "skyblue2", colour = "blue")
```



5. Create a histogram for the percent of urban population.

```
state.names = row.names(USArrests)
ggplot(USArrests) +
  aes(UrbanPop) +
  labs(title = "1973 % Urban Population") +
  geom_histogram(fill = "skyblue2", colour = "blue")
```

```
## `stat_bin()` using `bins = 30`. Pick better value with `binwidth`.
```


1973 % Urban Population
count
0
1
2
3
4
5
40
60
80
UrbanPop