

# lab-07-simpsons.Rmd

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## Packages

```
library(tidyverse)
library(mosaicData)
```

## Exercises

1.

```
?Whickham
```

Your answer: Observational , because the data is observational description states that is based on age, smoking, and mortality, which are all observable events and not produced via experiments.

2.

```
nrow(Whickham)
```

```
## [1] 1314
```

Your answer; obs 1314 var 3

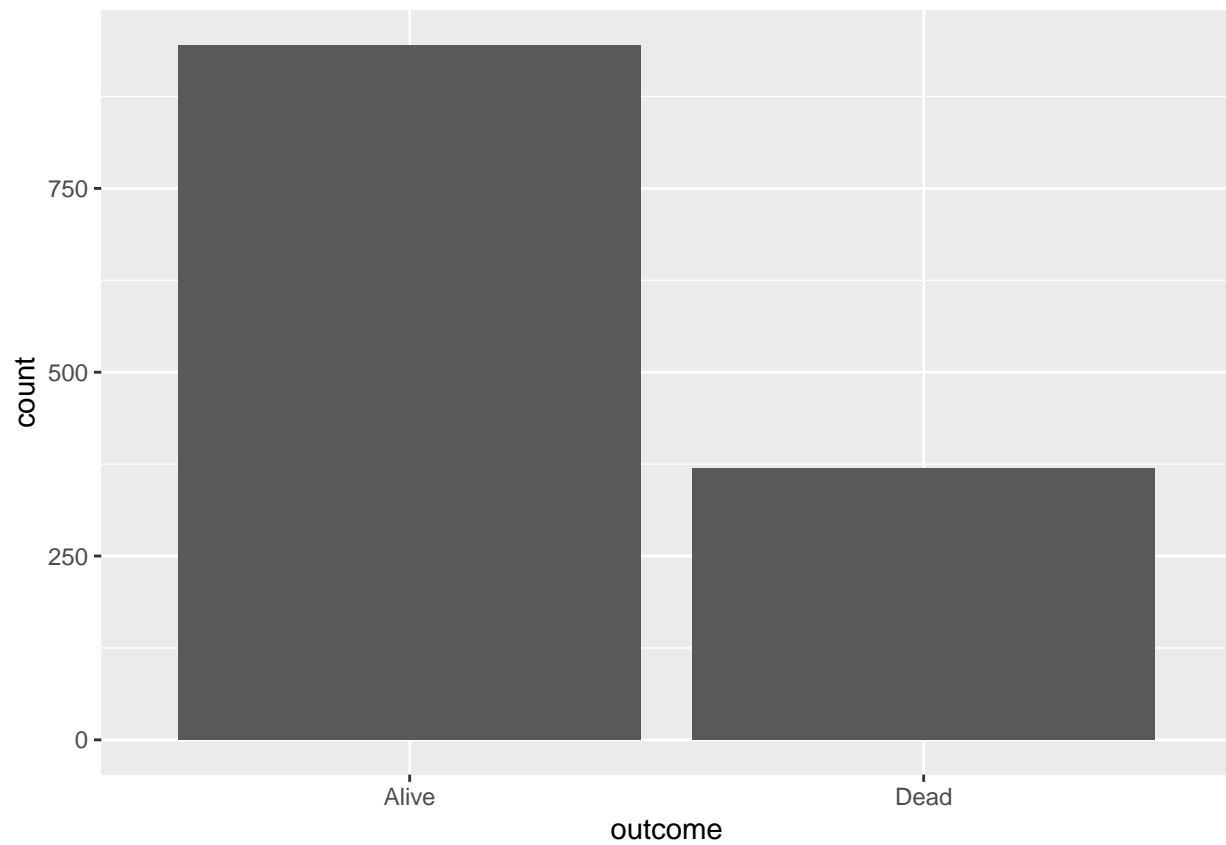
3.

```
names(Whickham)
```

```
## [1] "outcome" "smoker"  "age"
```

Your answer: there are 3 variables outcome

```
ggplot(Whickham, aes(x = outcome)) +
  geom_bar()
```

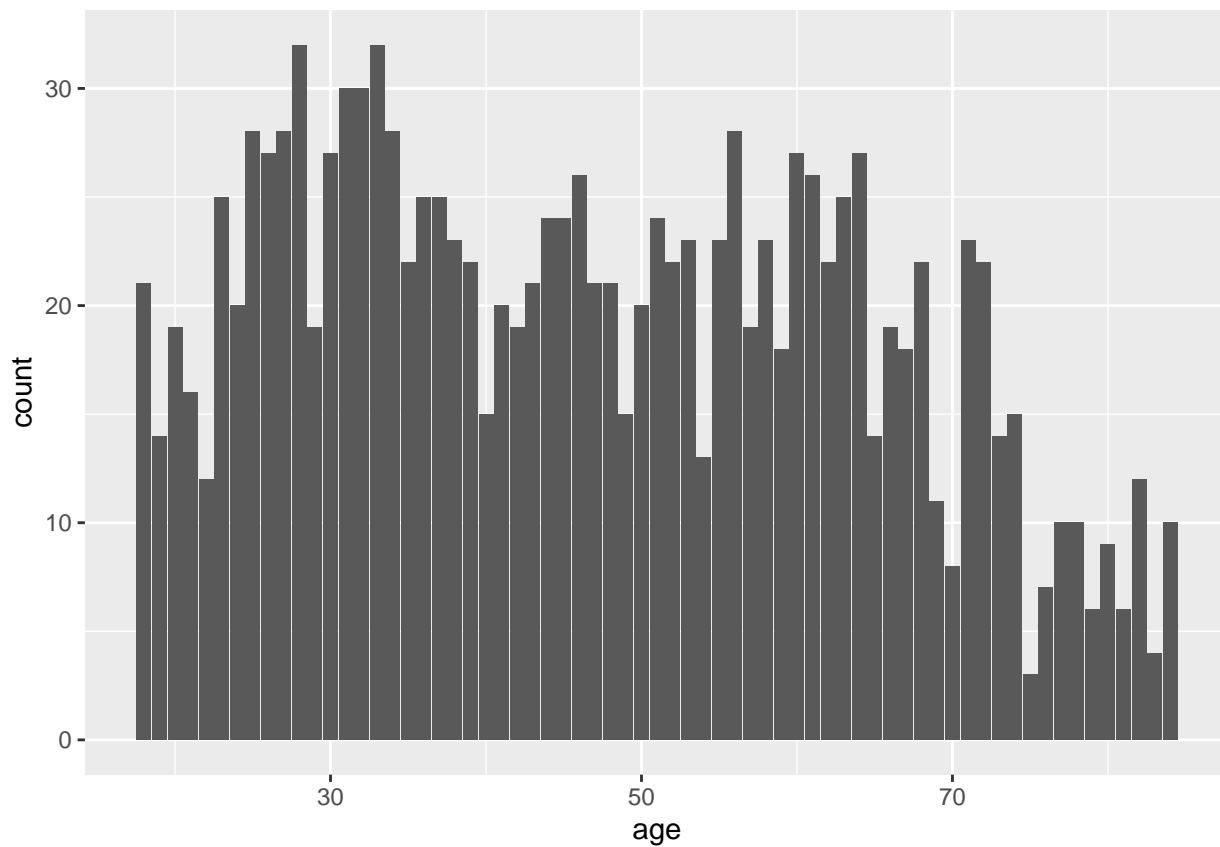


Your answer:

```
ggplot(Whickham, aes(x = smoker)) +  
  geom_bar()
```



```
ggplot(Whickham, aes(x = age)) +  
  geom_bar()
```



4.

Knit, commit, and push to github.

5.

```
Whickham %>%
  count(smoker, outcome)
```

```
##   smoker outcome    n
## 1     No   Alive 502
## 2     No    Dead 230
## 3    Yes   Alive 443
## 4    Yes    Dead 139
```

6.

7.

Knit, commit, and push to github.