Programming Assignment 3

1 Plot the 30-day mortality rates for heart attack

Read the outcome data into R via the `read.csv` function and look at the first few rows.

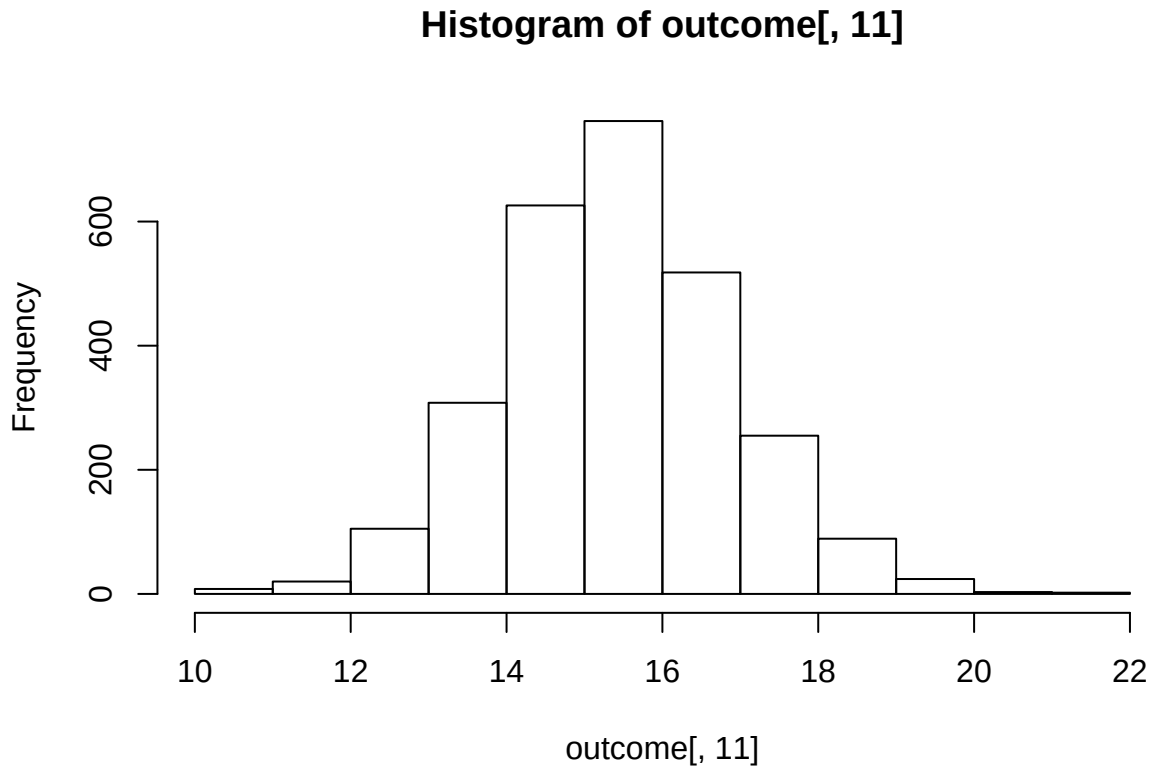
```
outcome <- read.csv("outcome-of-care-measures.csv", colClasses = "character")
#head(outcome)
```

To make a simple histogram of the 30-day death rates from heart attack (column 11 in the outcome dataset), run

```
outcome[, 11] <- as.numeric(outcome[, 11])
```

```
## Warning: NAs introduced by coercion
```

```
## You may get a warning about NAs being introduced; that is okay
hist(outcome[, 11])
```



2 Finding the best hospital in a state

Write a function called best that take two arguments: the 2-character abbreviated name of a state and an outcome name. The function reads the outcome-of-care-measures.csv file and returns a character vector with the name of the hospital that has the best (i.e. lowest) 30-day mortality for the specified outcome in that

state. The hospital name is the name provided in the Hospital.Name variable. The outcomes can be one of "heart attack", "heart failure", or "pneumonia". Hospitals that do not have data on a particular outcome should be excluded from the set of hospitals when deciding the rankings. Handling ties. If there is a tie for the best hospital for a given outcome, then the hospital names should be sorted in alphabetical order and the first hospital in that set should be chosen (i.e. if hospitals "b", "c", and "f" are tied for best, then hospital "b" should be returned).

```
source("best.R")
best("TX", "heart attack")
```

```
## [1] "CYPRESS FAIRBANKS MEDICAL CENTER"
```

```
best("TX", "heart failure")
```

```
## [1] "FORT DUNCAN MEDICAL CENTER"
```

```
best("MD", "heart attack")
```

```
## [1] "JOHNS HOPKINS HOSPITAL, THE"
```

```
best("MD", "pneumonia")
```

```
## [1] "GREATER BALTIMORE MEDICAL CENTER"
```

```
#best("BB", "heart attack")
#best("NY", "hert attack")
```