Programming Assignment 3: Hospital Quality rankhospital

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As usual read the function specification very carefully.

Its pretty much the same, right? except now we don't want the top in each state, we want the ranking inside of them, right?

so, we definitely are not going reinvent the wheel

we will be using our function from best.R up until the order step and then check what to return!

Only one thing to take care of, they told us they can ask for invalid data, so we want to make sure this time the passed data are legitimate

easy!

```
rankhospital <- function(state, outcome, num = "best") {

  data <- read.csv("outcome-of-care-measures.csv", colClasses = "character")
  outcomevalues = c("heart attack", "heart failure", "pneumonia")

  #only one caution, they told us they can ask for fake data
  #we need to make sure everyting they asked the function for is relevent

  if (!is.element(state, data$State)) {
    stop("invalid state")
  }
  if (!is.element(outcome, outcomevalues)) {
    stop("invalid outcome")
  }




  column <- c(11, 17, 23)[outcomevalues == outcome]
  data <- data[data$State == state, ]
  suppressWarnings(data[[column]] <- as.numeric(data[[column]]))
  data <- data[!is.na(data[[column]]), ]
  data <- data[order(data[column], data$Hospital.Name), ]

  #Now the new part

  if(num == "best"){
    #Testing if num was equal to best what should we return?
    value <- data$Hospital.Name[1]
```

```
  }

  else if(num == "worst"){
    #We should return the last one in our data since our order ranks the best on top
    value <- data$Hospital.Name[nrow(data)]

  }

  #Now if the num was number?
  #We check if its still in the boundairy of our data

  else if(num <= nrow(data)) {
    value <- data$Hospital.Name[num]

  }

  #Now as the PDF document said they could ask for some arbitray unrealistic number
  #and we should return NA by then
  else {
    value <- NA
  }

  return(value)


}
```

And that is it. save it in an R script called rankhospital.R and there you go :)