About best function and ranking

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R Markdown

The data for this assignment come from the Hospital Compare web site (http://hospitalcompare.hhs.gov) run by the U.S. Department of Health and Human Services. The purpose of the web site is to provide data and information about the quality of care at over 4,000 Medicare-certified hospitals in the U.S. This dataset essentially covers all major U.S. hospitals. This dataset is used for a variety of purposes, including determining whether hospitals should be fined for not providing high quality care to patients (see http: //goo.gl/jAXFX for some background on this particular topic). 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). 3 Ranking hospitals by outcome in a state: Write a function called rankhospital that takes three arguments: the 2-character abbreviated name of a state (state), an outcome (outcome), and the ranking of a hospital in that state for that outcome (num). The function reads the outcome-of-care-measures.csv file and returns a character vector with the name of the hospital that has the ranking specified by the num argument. For example, the call rankhospital(“MD”, “heart failure”, 5) would return a character vector containing the name of the hospital with the 5th lowest 30-day death rate for heart failure. The num argument can take values “best”, “worst”, or an integer indicating the ranking (smaller numbers are better). If the number given by num is larger than the number of hospitals in that state, then the function should return NA. Hospitals that do not have data on a particular outcome should be excluded from the set of hospitals when deciding the rankings.