tukey_iris_safe

What it does:

this function determines which rows (out of an expected numeric matrix) are outliers in all columns by the Tukey rule. Essentially, it runs the other function tukey.outlier on all columns. This was based on the buggy example in class but I fixed it. The difference in the original code used && which only checks first but instead it should be using & to check all. I also checked that the argument is a numeric matrix, and that it's not empty.

Input:

x. Expects a numeric matrix. Will stop and throw error if not a matrix, or not numeric.

Output:

A logical vector of length nrow(x). Each value is TRUE or FALSE indicating whether that row is an outlier by the Tukey rule in all columns.

Why I made it:

We had to do a debugging and defensive programming example. This is an example where the logical bug in the loop can be determined and solved and where I can add basic checks to make the function not just crash (or worse, do the wrong thing or silently) when the wrong input is presented.