Matrix multiplication algorithm

x, mat, str1, str2

Flag matrices in the list x

Does x contain matrices?

No

Return str1 ("no matrices found")

Yes

Make index idx from flag vector

Initialize matrix counter and result list

Loop over matrices

Is the compatible matrix counter = 0?

Yes

Return str2 ("no compatible matrices")

No

Return matrix multiplication result (list)

Routine finished

Function searches through list x, looks for matrices that can be multiplied with the matrix mat, and stores the result in a new list result

which(flag)

counter <- 0
result <- list()

for (i in idx)