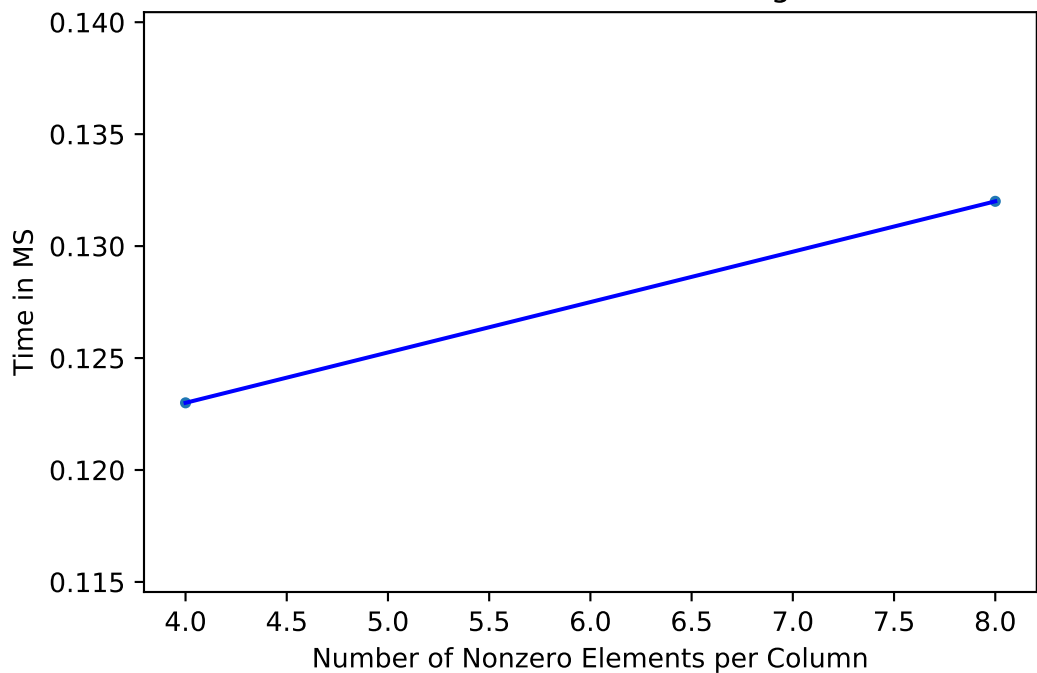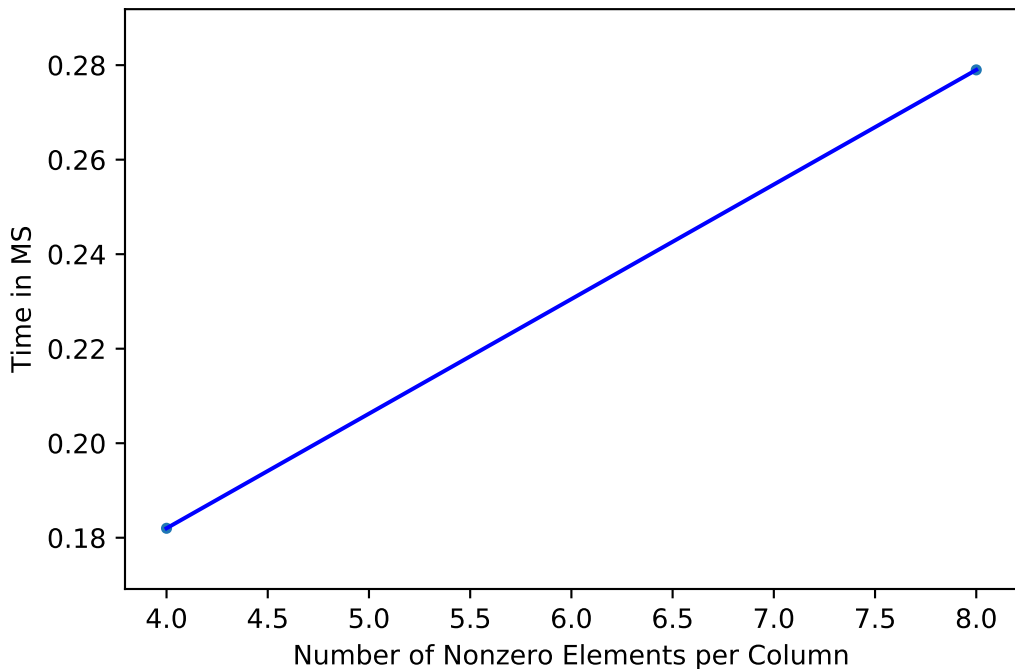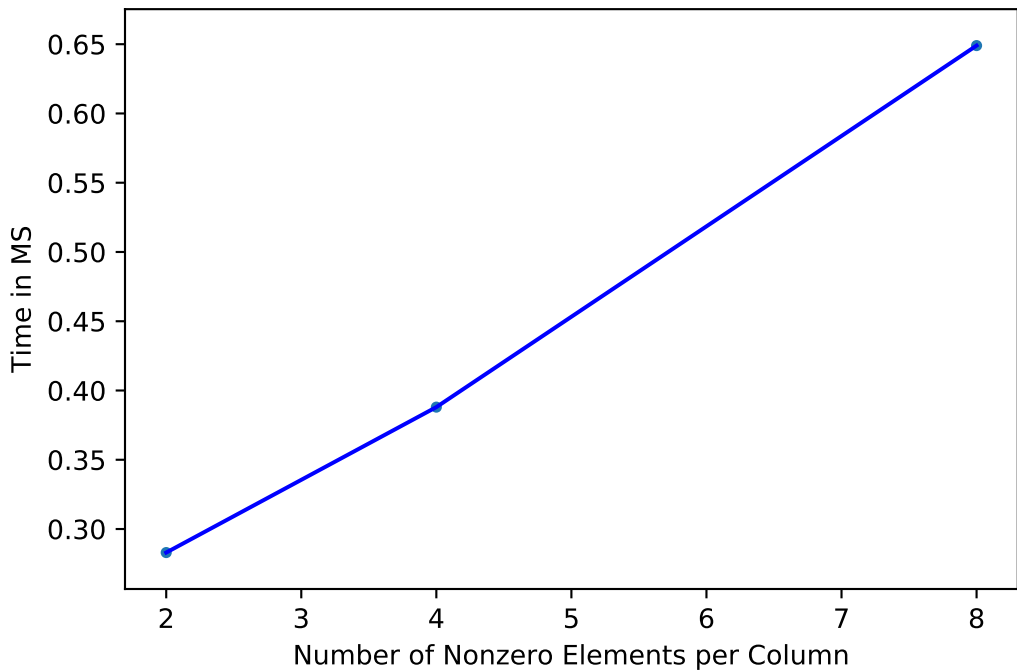Number of non zero column vs runtime for the diagonal matrix size = 262

Number of non zero column vs runtime for the diagonal matrix size = 524

Number of non zero column vs runtime for the diagonal matrix size = 1048...

Number of non zero column vs runtime for the diagonal matrix size = 2097...