# Programming Task 2.10

## Householder and modified Gram Schmidt has very similar results

## Classical Gram Schmidt has the worse result out of the three.P

# Programming Task 2.11

## For n =7, All three methods have very similar results. However, for n = 24, Householder is the most accurate followed by modified and classical Gram Schmidt being the worst. With low number of computations, the error for all methods are the same. However, with higher number of computations, the classical Gram Schmidt losses stability. Modified Gram Schmidt is shown to be less stable than Householder. This is due to the loss of orthogonality by the MGS algorithm as it directly tires to orthogonalizes the columns of A, whereas householder QR decomposition uses the Householder reflectors instead.