The printed results from the Terminal reorganized in a table:

Method	Kappa	Orthogonalization Error (Mean ± STD)	Reconstruction Error (Mean ± STD)	Solution Error (Mean ± STD)
CGS	1	$5.67\times10^{-16} \pm 8.12\times10^{-17}$	$3.22\times10^{-16} \pm 4.06\times10^{-17}$	$1.17\times10^{-15} \pm 1.66\times10^{-16}$
	10	$1.85\times10^{-15} \pm 4.13\times10^{-16}$	$1.99\times10^{-15} \pm 1.63\times10^{-16}$	$3.24\times10^{-15} \pm 1.12\times10^{-15}$
	100	$2.07\times10^{-14} \pm 8.96\times10^{-15}$	$1.92\times10^{-14} \pm 1.86\times10^{-15}$	$2.32\times10^{-14} \pm 1.67\times10^{-14}$
	1000	$2.04\times10^{-13} \pm 6.91\times10^{-14}$	$1.95\times10^{-13} \pm 1.90\times10^{-14}$	$2.68\times10^{-13} \pm 1.63\times10^{-13}$
MGS	1	$5.57\times10^{-16} \pm 6.16\times10^{-17}$	$2.45\times10^{-15} \pm 3.23\times10^{-16}$	$1.28\times10^{-15} \pm 3.26\times10^{-16}$
	10	$1.07\times10^{-15} \pm 1.68\times10^{-16}$	7.42 ± 0.48	$1.71\times10^{-15} \pm 4.29\times10^{-16}$
	100	$7.65\times10^{-15} \pm 1.05\times10^{-15}$	81.94 ± 3.01	$7.04\times10^{-15} \pm 4.30\times10^{-15}$
	1000	$8.09\times10^{-14} \pm 2.47\times10^{-14}$	807.85 ± 42.48	$4.21\times10^{-14} \pm 3.85\times10^{-14}$
Householder	1	0.0 ± 0.0	N/A	6.20 ± 1.00
	10	0.0 ± 0.0	N/A	6.40 ± 1.35
	100	0.0 ± 0.0	N/A	6.65 ± 0.97
	1000	0.0 ± 0.0	N/A	6.55 ± 0.90

*It seems like the Sol Error for Housholder is high and the Reconstruction Error is high for MGS. I don't know what the reason for this is, but I think the Kappa value and the Method can make big differences in the process of solving QR decomposition.

The printed results from the Terminal:

Method: CGS, Kappa: 1

Orthogonalization Error: Mean = 5.66584469230751e-16, STD = 8.124096141576565e-17

Reconstruction Error: Mean = 3.2190910999658936e-16, STD = 4.063558497211676e-17

Solution Error: Mean = 1.1704922753603586e-15, STD = 1.6591525970228223e-16

Method: CGS, Kappa: 10

Orthogonalization Error: Mean = 1.851270036327244e-15, STD = 4.127956658008551e-16

Reconstruction Error: Mean = 1.994460065641188e-15, STD = 1.6314310558346362e-16

Solution Error: Mean = 3.2425177408082883e-15, STD = 1.1175045904995752e-15

Method: CGS, Kappa: 100

Orthogonalization Error: Mean = 2.066700417399624e-14, STD = 8.958765721870828e-15

Reconstruction Error: Mean = 1.9156987822141e-14, STD = 1.8634746993455017e-15

Solution Error: Mean = 2.321138089920714e-14, STD = 1.670965600971174e-14

Method: CGS, Kappa: 1000

Orthogonalization Error: Mean = 2.0438418790468792e-13, STD = 6.911989560834343e-14

Reconstruction Error: Mean = 1.9533642365296259e-13, STD = 1.8959504056000043e-14

Solution Error: Mean = 2.6844018552815926e-13, STD = 1.6288508711317744e-13

Method: MGS, Kappa: 1

Orthogonalization Error: Mean = 5.57450471656868e-16, STD = 6.163308290324635e-17

Reconstruction Error: Mean = 2.452770080377307e-15, STD = 3.2280070886380675e-16

Solution Error: Mean = 1.2815668957910857e-15, STD = 3.259653058340729e-16

Method: MGS, Kappa: 10

Orthogonalization Error: Mean = 1.0679803570194105e-15, STD = 1.6810077480333576e-16

Reconstruction Error: Mean = 7.415617180240686, STD = 0.48471193881474856

Solution Error: Mean = 1.7086716061066623e-15, STD = 4.2934249168617015e-16

Method: MGS, Kappa: 100

Orthogonalization Error: Mean = 7.646429352935905e-15, STD = 1.052744008554045e-15

Reconstruction Error: Mean = 81.93943642914846, STD = 3.0085458606922297

Solution Error: Mean = 7.036145855279984e-15, STD = 4.300252499834288e-15

Method: MGS, Kappa: 1000

Orthogonalization Error: Mean = 8.086031685167593e-14, STD = 2.473646012069781e-14

Reconstruction Error: Mean = 807.8526513212871, STD = 42.477615647522995

Solution Error: Mean = 4.2112379907637133e-14, STD = 3.853114163866796e-14

Method: householder, Kappa: 1

Orthogonalization Error: Mean = 0.0, STD = 0.0

Solution Error: Mean = 6.204665877129472, STD = 1.002846781674324

Method: householder, Kappa: 10

Orthogonalization Error: Mean = 0.0, STD = 0.0

Solution Error: Mean = 6.404091491129701, STD = 1.3505035741846116

Method: householder, Kappa: 100

Orthogonalization Error: Mean = 0.0, STD = 0.0

Solution Error: Mean = 6.654127969821323, STD = 0.9739003313761736

Method: householder, Kappa: 1000

Orthogonalization Error: Mean = 0.0, STD = 0.0

Solution Error: Mean = 6.55257652985385, STD = 0.8953084234709566