ECON 5253 Problem Set 8

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1 Question No. 5

The estimates of $\hat{\beta}$ are very close to the true β with only a few values being different that too after two decimal places after zero.

2 Question No. 6

Again the estimates of true β and $\hat{\beta}\_gradient$ are very close.

3 Question No. 7

The $\hat{\beta}\_BFGS$ estimates seems to be very imprecise and far away from true β.

4 Question No. 8

The $\hat{\beta}\_MLE$ estimates again are closer and very similar to true β.

5 Question No. 9

Similar to part 8, the $\hat{\beta}\_OLS$ estimates are very similar to the true β.

OLS estimates Q.9

	Model 1
X1	1.501
	(0.002)
X2	-0.999
	(0.002)
X3	-0.249
	(0.002)
X4	0.749
	(0.002)
X5	3.499
	(0.002)
X6	-2.001
	(0.002)
X7	0.501
	(0.002)
X8	1.001
	(0.002)
X9	1.247
	(0.002)
X10	1.998
	(0.002)
Num.Obs.	1e+05
R2	0.991
R2 Adj.	0.991
AIC	145033.3
BIC	145138.0
Log.Lik.	-72505.666
F	1077029.265