ECON207 Session 10: Review Exercises

Question 1 Optimize the log-likelihood function on Session 10 slide 12 to show that the Maximum Likelihood estimators for μ and σ^2 are as shown on slide 13. Show that the information matrix is as shown on slide 16.

Question 2 When we estimated the linear probability model on slide 38 (results on slide 39), we made sure to use heteroskedasticity-consistent standard errors. Explain why the error term in a linear probability model must be heteroskedastic. (The hint is on slide 30).