1. For the Openflights airport network (2016), the high-energy physics citation network, , determine three separate values of γ for each network using a simple log-log plot, logarithmic binning, and the complementary cumulative distribution. For each estimate, include a figure with an appropriate fitted curve and the associated r 2 value.2. Implement the preferential attachment mixture model.Generate three random networks using this model with m0 = m = 8, an initially complete graph, and α ∈ {0, 1/4, 1}.