

1. Identify the line or lines of OpenBUGS code that specifies/specify the second stage of the model.
2. Are the outcomes for all the individual voters considered exchangeable? Briefly explain.
3. Think about an expression to which the joint posterior density of all the model parameters is proportional.
4. From the attached OpenBUGS output, what are the posterior mean and the 95% equal-tail credible set for b.female?  
Explain the Bayesian interpretation of the credible set you provided in the previous question.
5. Look at the BGR diagnostic plots for the parameters. What does this indicate? What would you do to fix this if necessary?
6. How many burn-in iterations were discarded?
7. Why is the hierarchical model appropriate in this application? (There are many good answers for this.)