

**Instructions.** Download the edge lists created from the books of the Old Testament in the King James translation of the Christian bible (navigate to Assignment 3 on the Assignments page on CANVAS). There are two data files. One data set has the nodes labelled numerically (easier to use) and another with textual labels for the nodes. The two files contain the same edge list but it is ordered differently. To match them up you would need to order them both by edge weighting.

Note that this is an undirected network but the edges are weighted and the weights are not normalized. The edge weights are a raw count of how many verses there are (in the King James version of the bible) that contain that pair of names or places.

Please submit your work in the form of a PDF document on CANVAS. This should consist of a typed report with written answers to the questions below and any figures, plots or tables presenting results that support your answers. Please take note of the assessment criteria listed on CANVAS.

**Question 1.** Who is the most important person in the King James Bible network? What is the most important place in the King James Bible? Answer this by calculating degree centrality, eigenvector centrality and closeness, and make lists of the 15 most important nodes according to each of the centrality measures. Which nodes appear in all 3 lists?

**Question 2.** Given that edges in this network represent co-occurrence of two places or names in the same verse, signifying proximity in a text, which measure of centrality (considering all of them rather than just the three you have used for question 1) do you consider the most relevant?

**Question 3.** Is the Bible network assortative, neutral or disassortative?