Association

1. Consider the contingency table for the binary variables A and B at different values of the control variable C.

			A	
			1	0
C = 0	B	1	0	15
		0	15	30
C = 1	B	1	5	0
		0	0	15

   a. Compute the ϕ coneefficient for A and B when C=0, C=1, and C=0 or 1.
   b. What conclusions can you draw form the above result?

2. The adult.arff contains census data, which is converted from the data from the UCI Machine Learning Repository (http://archive.ics.uci.edu/ml/machine-learning-databases/adult/).
   a. Load the dataset into R and analyze the attribute types and values.
   b. Apply R's Apriori algorithm to generate associate rules. Set the minimal confidence as 0.9 and the number of returned rules as 15. Display and describe the result.
   c. Generate the R studio report.