1. Verify that for $\beta = 0, 1, \infty$, $F_\beta$ is equal to $p, F_1, r$, respectively.

2. Find weights $w_i, i = 1, \ldots, 4$, such that weighted accuracy is equal to the given performance metric.
   (a) Accuracy
   (b) Sensitivity
   (c) Specificity
   (d) Precision
   (e) Recall
   (f) $F_\beta$

3. Split `germancredit.csv` into 70% training and 30% test data.
   (a) Fit a naive Bayes classifier for predicting default, and calculate the accuracy, sensitivity, specificity, precision, and $F_1$ measure on the test data.
   (b) Find the probability threshold $p_0$ that optimizes the $F_1$ measure on the training data.
   (c) Recalculate the accuracy, sensitivity, specificity, precision, and $F_1$ measure on the test data using the new probability threshold.