Question 1: Of the 31 different loss functions introduced, what are the 5 aspects or problems associated with the loss functions?

Question 2: In the context of loss functions in classification, give me examples of a few loss functions that are “better” than perceptron loss?

Question 3: For face recognition, what can the center loss function do that the cross-entropy loss function cannot?

Answer 1: 11 loss functions for (binary) classification problems, 6 loss functions for regression problems, 4 loss functions for unsupervised learning, 4 loss functions of object detection, and 6 loss functions of face recognition.

Answer 2: Exponential loss and logarithmic loss are better choices than perceptron loss.

Answer 3: Cross entropy loss can separate categories by determining how things are different from one another, but it cannot necessarily tell how similar things are within a single category. That is where the center loss function comes in handy; this function helps to constrain the in-class distance that the cross-entropy loss function fails to do.