```python
# -*- coding: utf-8 -*-
"""
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The loss function of a logistic regression with multiple points is given by:
    L(y,y_pred)= 1/n * ∑ -(y(i) * ln(y_pred) + (1-y(i)) * ln(1-y_pred))
    where y is the true label (either 1 or 0),
    y_pred is the predicted probability for that label to be 1 (range from 0 to 1 continously)

    y_pred is computed as 1/(1+e^-z)
    where z = m*x + b

Given m = 1/2 and b = 1:
    z for x1 = -2 is:
        1/2 * -2 + 1 = 0
    y_pred for z = 0 is:
        1/(1+e^0) = 1/2

    z for x2 = 1 is:
        1/2 * 1 + 1 = 3/2
    y_pred for z = 3/2 is:
        1/(1+e^-(3/2))

Now to compute the log loss for each data point:
    L1 = -(0 + 1 * ln(1-1/2)) = -ln(1/2) # y is 0
    L2 = -(1 * ln(1/(1+e^-(3/2))) + 0) = -ln(1/(1+e^-(3/2))) # y is 1

the average log loss over the dataset is:
    1/2 * (L1+L2)=

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    1/2 * (-ln(1/2)-ln(1/(1+e^-(3/2))))
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```