```
% Test the predictions given by the model on the test datas
%CIFAR Dataset
[ C2_labels_predictions, C2_confusion_matrix, C2_accuracy ]
= g2_predict_linear_regression(C_data_test(1:5000,:),
C_labels_test(1:5000), C2_w_hat,0, 1);
% Display the confusion matrix and the accuracy
C2_confusion_matrix
C2_accuracy
% Display the confusion matrix through an image
colormap hot;
image(C2_confusion_matrix);
title('confusion matrix - naive bayes classifier - CIFAR dataset')
% Scatter plot of the resulting labels versus the true labels
C2_error = g3_plot_error( C_labels_test(1:5000),
 C2_labels_predictions, 20)
C2 confusion matrix =
   NaN
           0
                              3
                                                 6
                                                              8
     0
          31
                  5
                        7
                              6
                                    3
                                           6
                                                 2
                                                       6
                                                             6
                                                                   29
     1
          38
                 5
                        5
                              5
                                    2
                                           3
                                                 2
                                                       3
                                                              5
                                                                   33
     2
          35
                 5
                                    4
                                           7
                                                 1
                        6
                              6
                                                                   29
                                                       4
                                                              4
     3
          35
                 4
                        6
                              5
                                    3
                                           5
                                                 3
                                                       6
                                                                   27
                                                             6
                                    3
     4
          36
                                                 3
                 6
                        6
                              6
                                           4
                                                       4
                                                             5
                                                                   28
     5
          36
                 5
                        5
                              4
                                    3
                                           6
                                                 3
                                                       5
                                                              4
                                                                   28
     6
          36
                 3
                        5
                              4
                                    3
                                           5
                                                 3
                                                       4
                                                              4
                                                                   32
     7
                                    4
                                           5
                                                       3
                                                                   38
          33
                 3
                        4
                              4
                                                 1
                                                             5
                                    2
                        7
                              7
                                                       5
     8
          26
                 5
                                           6
                                                 3
                                                             5
                                                                   34
                                    2
          32
                 4
                        3
                              4
                                           6
                                                 2
                                                       5
                                                              4
                                                                   38
C2_accuracy =
    0.1056
C2_error =
    3.8548
```







