```
Trial>> [w_aleatorio, w_saida, table] = elm_mlp(X_tr, d_tr, X_va, d_va, X_test,↙
d_test,X,S,0.001,2,0.1);
lambda = 0.001000 -> CER = 0.073491

lambda = 0.101000 -> CER = 0.073491

lambda = 0.201000 -> CER = 0.073491

lambda = 0.301000 -> CER = 0.073491

lambda = 0.401000 -> CER = 0.073491

lambda = 0.501000 -> CER = 0.073491

lambda = 0.601000 -> CER = 0.073491

lambda = 0.701000 -> CER = 0.073491

lambda = 0.801000 -> CER = 0.073491

lambda = 0.901000 -> CER = 0.073491

lambda = 1.001000 -> CER = 0.073491

lambda = 1.101000 -> CER = 0.073491

lambda = 1.201000 -> CER = 0.073491

lambda = 1.301000 -> CER = 0.073491

lambda = 1.401000 -> CER = 0.073491

lambda = 1.501000 -> CER = 0.073491

lambda = 1.601000 -> CER = 0.073491

lambda = 1.701000 -> CER = 0.073491

lambda = 1.801000 -> CER = 0.073491

lambda = 1.901000 -> CER = 0.073491

RESULT OF VALIDATION
best_lambda = 0.001000 -> CER = 0.073491

RESULT IN TESTING
CER per class
    0.0208
    0.0802
    0.0939
    0.0601
    0.0915
    0.0335
    0.0618
    0.0972
    0.0943
    0.0275
CER = 0.066082
Trial>> [w_aleatorio, w_saida, table] = elm_mlp(X_tr, d_tr, X_va, d_va, X_test,↙
d_test,X,S,0.001,10,0.5);
lambda = 0.001000 -> CER = 0.073986
```

```
lambda = 0.501000 -> CER = 0.073939

lambda = 1.001000 -> CER = 0.073989

lambda = 1.501000 -> CER = 0.073939

lambda = 2.001000 -> CER = 0.073939

lambda = 2.501000 -> CER = 0.073939

Operation terminated by user during linear_classifier (line 32)

In elm_mlp (line 10)
[w_saida, table] =
linear_classifier(transpose(Z),d_tr,transpose(tanh(transpose(X_va)*w_aleatorio)),d_va,↙
transpose(tanh(transpose(X_test)*w_aleatorio)),d_test,
tanh(X*w_aleatorio),S, initial_lambda,final_lambda,step);
Trial>> [w_aleatorio, w_saida, table] = elm_mlp(X_tr, d_tr, X_va, d_va, X_test,↙
d_test,X,S,0.001,20,2);
lambda = 0.001000 -> CER = 0.072801

lambda = 2.001000 -> CER = 0.072851

lambda = 4.001000 -> CER = 0.072752

lambda = 6.001000 -> CER = 0.072803

lambda = 8.001000 -> CER = 0.072753

lambda = 10.001000 -> CER = 0.072753

lambda = 12.001000 -> CER = 0.072640

lambda = 14.001000 -> CER = 0.072640

lambda = 16.001000 -> CER = 0.072585

lambda = 18.001000 -> CER = 0.072584

RESULT OF VALIDATION
best_lambda = 18.001000 -> CER = 0.072584

RESULT IN TESTING
CER per class
    0.0193
    0.0739
    0.0879
    0.0567
    0.0991
    0.0350
    0.0737
    0.0984
    0.0948
    0.0236
CER = 0.066237
Trial>>
```