```
 1  C:\Users\Usuario\AppData\Local\Programs\Python\
    Python311\python.exe "C:\Users\Usuario\
    PycharmProjects\AYR_2024_1\Unidad 2\
    Intro_ConvolutionalNeuronalNetwork\entrenar.py"
 2  2024-02-19 19:51:03.257739: I tensorflow/core/util/
    port.cc:113] oneDNN custom operations are on. You may
     see slightly different numerical results due to
    floating-point round-off errors from different
    computation orders. To turn them off, set the
    environment variable `TF_ENABLE_ONEDNN_OPTS=0`.
 3  WARNING:tensorflow:From C:\Users\Usuario\AppData\
    Local\Programs\Python\Python311\Lib\site-packages\
    keras\src\losses.py:2976: The name tf.losses.
    sparse_softmax_cross_entropy is deprecated. Please
    use tf.compat.v1.losses.sparse_softmax_cross_entropy
    instead.
 4
 5  WARNING:tensorflow:From C:\Users\Usuario\AppData\
    Local\Programs\Python\Python311\Lib\site-packages\
    keras\src\backend.py:277: The name tf.
    reset_default_graph is deprecated. Please use tf.
    compat.v1.reset_default_graph instead.
 6
 7  Found 100 images belonging to 2 classes.
 8  Found 60 images belonging to 2 classes.
 9  2024-02-19 19:51:18.689282: I tensorflow/core/
    platform/cpu_feature_guard.cc:182] This TensorFlow
    binary is optimized to use available CPU instructions
     in performance-critical operations.
10  To enable the following instructions: SSE SSE2 SSE3
    SSE4.1 SSE4.2 AVX2 FMA, in other operations, rebuild
    TensorFlow with the appropriate compiler flags.
11  WARNING:tensorflow:From C:\Users\Usuario\AppData\
    Local\Programs\Python\Python311\Lib\site-packages\
    keras\src\layers\pooling\max_pooling2d.py:161: The
    name tf.nn.max_pool is deprecated. Please use tf.nn.
    max_pool2d instead.
12
13  Epoch 1/25
14  WARNING:tensorflow:From C:\Users\Usuario\AppData\
    Local\Programs\Python\Python311\Lib\site-packages\
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14 keras\src\utils\tf_utils.py:492: The name tf.ragged.
   RaggedTensorValue is deprecated. Please use tf.compat
   .v1.ragged.RaggedTensorValue instead.
15
16 WARNING:tensorflow:From C:\Users\Usuario\AppData\
   Local\Programs\Python\Python311\Lib\site-packages\
   keras\src\engine\base_layer_utils.py:384: The name tf
   .executing_eagerly_outside_functions is deprecated.
   Please use tf.compat.v1.
   executing_eagerly_outside_functions instead.
17
18 30/30 [==============================] - 52s 2s/step
    - loss: 7.5169 - accuracy: 0.4545 - val_loss: 0.8343
    - val_accuracy: 0.3667
19 Epoch 2/25
20 30/30 [==============================] - 42s 1s/step
    - loss: 0.3677 - accuracy: 0.8750 - val_loss: 0.1064
    - val_accuracy: 1.0000
21 Epoch 3/25
22 30/30 [==============================] - 40s 1s/step
    - loss: 0.0511 - accuracy: 0.9886 - val_loss: 0.0043
    - val_accuracy: 1.0000
23 Epoch 4/25
24 30/30 [==============================] - 43s 1s/step
    - loss: 0.0794 - accuracy: 0.9778 - val_loss: 0.0992
    - val_accuracy: 0.9333
25 Epoch 5/25
26 30/30 [==============================] - 40s 1s/step
    - loss: 0.0351 - accuracy: 0.9886 - val_loss: 0.0013
    - val_accuracy: 1.0000
27 Epoch 6/25
28 30/30 [==============================] - 42s 1s/step
    - loss: 0.0063 - accuracy: 1.0000 - val_loss: 3.
   3622e-04 - val_accuracy: 1.0000
29 Epoch 7/25
30 30/30 [==============================] - 43s 1s/step
    - loss: 0.0036 - accuracy: 1.0000 - val_loss: 2.
   0139e-04 - val_accuracy: 1.0000
31 Epoch 8/25
32 30/30 [==============================] - 42s 1s/step
    - loss: 0.0016 - accuracy: 1.0000 - val_loss: 1.
```

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32 8788e-04 - val_accuracy: 1.0000
33 Epoch 9/25
34 30/30 [==============================] - 40s 1s/step
     - loss: 0.0010 - accuracy: 1.0000 - val_loss: 2.
   1040e-05 - val_accuracy: 1.0000
35 Epoch 10/25
36 30/30 [==============================] - 41s 1s/step
     - loss: 0.0012 - accuracy: 1.0000 - val_loss: 1.
   6668e-04 - val_accuracy: 1.0000
37 Epoch 11/25
38 30/30 [==============================] - 42s 1s/step
     - loss: 9.6976e-04 - accuracy: 1.0000 - val_loss: 3.
   3218e-05 - val_accuracy: 1.0000
39 Epoch 12/25
40 30/30 [==============================] - 41s 1s/step
     - loss: 5.0959e-04 - accuracy: 1.0000 - val_loss: 1.
   6864e-05 - val_accuracy: 1.0000
41 Epoch 13/25
42 30/30 [==============================] - 39s 1s/step
     - loss: 6.2830e-04 - accuracy: 1.0000 - val_loss: 8.
   7658e-06 - val_accuracy: 1.0000
43 Epoch 14/25
44 30/30 [==============================] - 39s 1s/step
     - loss: 2.1635e-04 - accuracy: 1.0000 - val_loss: 5.
   3405e-06 - val_accuracy: 1.0000
45 Epoch 15/25
46 30/30 [==============================] - 39s 1s/step
     - loss: 1.4592e-04 - accuracy: 1.0000 - val_loss: 4.
   2001e-06 - val_accuracy: 1.0000
47 Epoch 16/25
48 30/30 [==============================] - 39s 1s/step
     - loss: 0.0233 - accuracy: 1.0000 - val_loss: 1.
   3216e-04 - val_accuracy: 1.0000
49 Epoch 17/25
50 30/30 [==============================] - 39s 1s/step
     - loss: 0.0616 - accuracy: 0.9773 - val_loss: 0.0013
     - val_accuracy: 1.0000
51 Epoch 18/25
52 30/30 [==============================] - 39s 1s/step
     - loss: 0.0081 - accuracy: 1.0000 - val_loss: 8.
   1535e-05 - val_accuracy: 1.0000
```

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53 Epoch 19/25
54 30/30 [==============================] - 39s 1s/step
   - loss: 0.0020 - accuracy: 1.0000 - val_loss: 1.
   0927e-05 - val_accuracy: 1.0000
55 Epoch 20/25
56 30/30 [==============================] - 39s 1s/step
   - loss: 0.0262 - accuracy: 0.9886 - val_loss: 0.0025
   - val_accuracy: 1.0000
57 Epoch 21/25
58 30/30 [==============================] - 39s 1s/step
   - loss: 0.0026 - accuracy: 1.0000 - val_loss: 1.
   0337e-04 - val_accuracy: 1.0000
59 Epoch 22/25
60 30/30 [==============================] - 40s 1s/step
   - loss: 0.0047 - accuracy: 1.0000 - val_loss: 1.
   7233e-05 - val_accuracy: 1.0000
61 Epoch 23/25
62 30/30 [==============================] - 39s 1s/step
   - loss: 9.1626e-04 - accuracy: 1.0000 - val_loss: 3.
   3846e-05 - val_accuracy: 1.0000
63 Epoch 24/25
64 30/30 [==============================] - 40s 1s/step
   - loss: 6.2615e-04 - accuracy: 1.0000 - val_loss: 8.
   8174e-06 - val_accuracy: 1.0000
65 Epoch 25/25
66 30/30 [==============================] - 42s 1s/step
   - loss: 6.0036e-04 - accuracy: 1.0000 - val_loss: 1.
   3788e-05 - val_accuracy: 1.0000
67 C:\Users\Usuario\AppData\Local\Programs\Python\
   Python311\Lib\site-packages\keras\src\engine\training
   .py:3103: UserWarning: You are saving your model as
   an HDF5 file via `model.save()`. This file format is
   considered legacy. We recommend using instead the
   native Keras format, e.g. `model.save('my_model.keras
   ')`.
68   saving_api.save_model(
69
70 Process finished with exit code 0
71
```