

# testgan

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## 1 Notebook GAN

Dans ce notebook, nous allons mis en place un GAN dans le but de générer des images

### 1.1 Installation

```
[ ]: # utiliser cette cellule pour installer les librairies manquantes
# pour cela il suffit de taper dans cette cellule : !pip install_
    ↪ nom_librairie_manquante
# d'exécuter la cellule et de relancer la cellule suivante pour voir si tout se_
    ↪ passe bien
# recommencer tant que toutes les librairies ne sont pas installées ...
```

```
[ ]: # Importation des différentes librairies utiles pour le notebook

# Tensorboard
# Load the TensorBoard notebook extension
%load_ext tensorboard
from tensorflow.keras.callbacks import TensorBoard
import datetime

# Clear any logs from previous runs
!rm -rf ./logs/

log_dir = "logs/fit/" + datetime.datetime.now().strftime("%Y%m%d-%H%M%S")
tensorboard_callback = TensorBoard(log_dir=log_dir, histogram_freq=1)

#Sickit learn met régulièrement à jour des versions et
#indique des futurs warnings.
#ces deux lignes permettent de ne pas les afficher.
import warnings
warnings.filterwarnings("ignore", category=FutureWarning)

# librairies générales
import pickle
import pandas as pd
```

```

#from scipy.stats import randint
import numpy as np
import string
import time
import base64
import re
import sys
import copy
import random
from numpy import mean
from numpy import vstack
from numpy import std
from numpy import ones
from numpy import zeros
from numpy.random import randint

# librairie affichage
import matplotlib.pyplot as plt
import seaborn as sns
from PIL import Image
import plotly.graph_objs as go
import plotly.offline as py

from sklearn.metrics import confusion_matrix
from sklearn.manifold import TSNE
from sklearn.decomposition import PCA
from sklearn.model_selection import KFold
from sklearn.model_selection import cross_val_score
from sklearn.model_selection import train_test_split
from sklearn.pipeline import Pipeline
from sklearn.naive_bayes import GaussianNB
from sklearn.metrics import accuracy_score

# TensorFlow et keras
import tensorflow as tf
from keras import layers
from keras import models
from keras import optimizers
from keras.preprocessing.image import ImageDataGenerator
from keras.utils import img_to_array, load_img
from keras.callbacks import ModelCheckpoint, EarlyStopping
import keras
from keras.models import Sequential
from keras.layers import Dense, Dropout, Flatten
from keras.layers import Conv2D, MaxPooling2D
from keras.preprocessing import image

```

```

from tqdm import tqdm
from keras.models import load_model
from sklearn.model_selection import KFold, StratifiedKFold
from keras.datasets import fashion_mnist
from tensorflow.keras.utils import to_categorical
from keras.models import Sequential
from keras.layers import Conv2D
from keras.layers import Conv2DTranspose
from keras.layers import MaxPooling2D
from keras.layers import BatchNormalization
from keras.layers import Dense
from keras.layers import Flatten
from keras.layers import Conv2DTranspose
from keras.layers import LeakyReLU
from keras.layers import Reshape
from tensorflow.keras.optimizers import SGD
from tensorflow.keras.optimizers import Adam
import os
from os import listdir
from os.path import isfile, join
import cv2
import glob
from numpy import expand_dims
import matplotlib.pyplot as plt

```

```

[ ]: # pour monter son drive Google Drive local
from google.colab import drive
drive.mount('/content/gdrive')

```

Mounted at /content/gdrive

```

[ ]: import sys
my_local_drive='/content/gdrive/MyDrive/ML2_prjt2023'
# Ajout du path pour les librairies, fonctions et données
sys.path.append(my_local_drive)
# Se positionner sur le répertoire associé
%cd $my_local_drive

%pwd

```

```

[ ]: IMG_SIZE=124
COLUMNS = 25 # Nombre d'images à afficher

#Donne une liste d'images à la bonne dimension avec leur classe
def create_training_data(path_data, list_classes):
    training_data=[]
    for classes in list_classes:

```

```

path=os.path.join(path_data, classes)
class_num=list_classes.index(classes)
for img in os.listdir(path):
    try:
        img_array = cv2.imread(os.path.join(path,img), cv2.IMREAD_UNCHANGED)
        new_array = cv2.resize(img_array, (IMG_SIZE, IMG_SIZE))
        #new_array = cv2.cvtColor(new_array, cv2.COLOR_BGR2RGB)
        training_data.append([new_array, class_num])
    except Exception as e:
        pass
return training_data

def create_X_y (path_data, list_classes):
    # récupération des données
    training_data=create_training_data(path_data, list_classes)
    # tri des données
    random.shuffle(training_data)
    # création de X et y
    X=[]
    y=[]
    for features, label in training_data:
        X.append(features)
        y.append(label)
    X=np.array(X).reshape(-1,IMG_SIZE, IMG_SIZE, 3)
    y=np.array(y)
    return X,y

# Chargement des données
def load_data():
    my_path="Data_Project/Tiger-Fox-Elephant/"
    #my_path="."
    my_classes=['fox']
    X,y=create_X_y (my_path,my_classes)

    # Ajout d'une dimension pour le canal (1) !! pas besoin de l'ajouter il y est
    ↪ déjà
    #Xi = expand_dims(X_train, axis=-1)
    # Normalisation
    Xi = X.astype('float32')
    # scale from [0,255] to [0,1]
    Xi = Xi / 255.0
    return Xi

def plot_examples(X):
    plt.figure(figsize=(60,60))
    for i in range(COLUMNS):

```

```
plt.subplot(5,5,i+1)
plt.xticks([])
plt.yticks([])
plt.grid(False)
# cv2 lit met les images en BGR et matplotlib lit du RGB
# X[i] = cv2.cvtColor(X[i], cv2.COLOR_BGR2RGB)
plt.imshow(X[i, :, :])
```

```
[ ]: def create_generator(latent_dim=100):
    model = Sequential()
    # 1/4 de l'image (7x7) * nombre d'images possibles
    n_nodes = 100 * 31 * 31
    model.add(Dense(n_nodes, input_dim=latent_dim))
    model.add(BatchNormalization())
    model.add(LeakyReLU(alpha=0.2))
    model.add(Reshape((31, 31, 100)))
    # upsample to 14x14
    model.add(Conv2DTranspose(128, (4,4), strides=(2,2), padding='same'))
    model.add(BatchNormalization())
    model.add(LeakyReLU(alpha=0.2))
    # upsample to 28x28
    model.add(Conv2DTranspose(128, (4,4), strides=(2,2), padding='same'))
    model.add(BatchNormalization())
    model.add(LeakyReLU(alpha=0.2))
    model.add(Conv2D(3, (7,7), activation='sigmoid', padding='same'))
    opt = Adam(learning_rate=0.0002, beta_1=0.5)
    model.compile(loss='binary_crossentropy', optimizer=opt, metrics=['accuracy'])
    return model
```

La définition de la partie du générateur est :

```
[ ]: generator_model=create_generator()
generator_model.summary()
```

Model: "sequential"

Layer (type)	Output Shape	Param #
dense (Dense)	(None, 96100)	9706100
batch_normalization (Batch Normalization)	(None, 96100)	384400
leaky_re_lu (LeakyReLU)	(None, 96100)	0
reshape (Reshape)	(None, 31, 31, 100)	0
conv2d_transpose (Conv2DTranspose)	(None, 62, 62, 128)	204928

```

nspose)

batch_normalization_1 (Batch Normalization) (None, 62, 62, 128) 512

leaky_re_lu_1 (LeakyReLU) (None, 62, 62, 128) 0

conv2d_transpose_1 (Conv2DTranspose) (None, 124, 124, 128) 262272

batch_normalization_2 (Batch Normalization) (None, 124, 124, 128) 512

leaky_re_lu_2 (LeakyReLU) (None, 124, 124, 128) 0

conv2d (Conv2D) (None, 124, 124, 3) 18819

```

```

=====
Total params: 10,577,543
Trainable params: 10,384,831
Non-trainable params: 192,712
-----

```

Nous pouvons tester le générateur pour voir un exemple d'image générée :

```

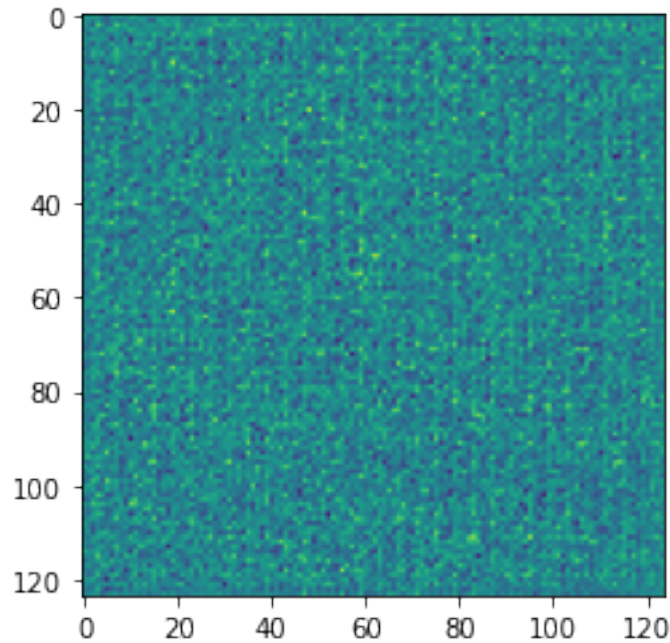
[ ]: latent_dim=100
generator = create_generator()
noise=tf.random.normal([1,latent_dim])
generated_image = generator(noise, training=False)
plt.imshow(generated_image[0, :, :, 0])

```

```

[ ]: <matplotlib.image.AxesImage at 0x7f46109f6dc0>

```



```
[ ]: def create_discriminator():
    model_fox = Sequential()
    # Convolution and pooling
    model_fox.add(Conv2D(filters=32, kernel_size=(3, 3), activation='relu',
    ↪input_shape=(IMG_SIZE, IMG_SIZE, 3), name="Conv2D_1", padding="same",
    ↪strides=1))
    model_fox.add(tf.keras.layers.BatchNormalization(axis=-1))
    model_fox.add(MaxPooling2D(pool_size=(2, 2), name="Maxpooling2D_1"))
    model_fox.add(Dropout(0.3))

    # Convolution and pooling
    #model_fox.add(Conv2D(filters=64, kernel_size=(3, 3), activation='relu',
    ↪input_shape=(IMG_SIZE, IMG_SIZE, 3), name="Conv2D_2", padding="same",
    ↪strides=1))
    #model_fox.add(tf.keras.layers.BatchNormalization(axis=-1))
    #model_fox.add(MaxPooling2D(pool_size=(2, 2), name="Maxpooling2D_2"))
    #model_fox.add(Dropout(0.3))

    # flatten
    model_fox.add(Flatten(name="flatten" ) )

    # Partie classification
    model_fox.add(Dense(512, activation='relu'))
    model_fox.add(Dense(1, activation='sigmoid'))
```

```

    #model_fox.compile(optimizer='adam',
↳loss='sparse_categorical_crossentropy',metrics=['accuracy'])
    model_fox.compile(optimizer=tf.keras.optimizers.Adam(learning_rate=1e-3),
↳loss='binary_crossentropy',metrics=['accuracy'])

    return model_fox

# def create_discriminator():
#     model = Sequential()
#     model.add(Conv2D(64, (3,3), strides=(2, 2), padding='same',
↳input_shape=[124,124,3]))
#     model.add(LeakyReLU(alpha=0.2))
#     model.add(Dropout(0.3))
#     model.add(Conv2D(64, (3,3), strides=(2, 2), padding='same'))
#     model.add(LeakyReLU(alpha=0.2))
#     model.add(Dropout(0.3))
#     model.add(Flatten())
#     model.add(Dense(1, activation='sigmoid'))
#     opt = Adam(learning_rate=0.0002, beta_1=0.5)
#     model.compile(loss='binary_crossentropy', optimizer=opt,
↳metrics=['accuracy'])
#     return model

```

Le modèle pour le discriminateur est :

```

[ ]: model_discriminator=create_discriminator()
    model_discriminator.summary()

```

Model: "sequential\_2"

Layer (type)	Output Shape	Param #
Conv2D_1 (Conv2D)	(None, 124, 124, 32)	896
batch_normalization_6 (Batch Normalization)	(None, 124, 124, 32)	128
Maxpooling2D_1 (MaxPooling2D)	(None, 62, 62, 32)	0
dropout (Dropout)	(None, 62, 62, 32)	0
flatten (Flatten)	(None, 123008)	0
dense_2 (Dense)	(None, 512)	62980608
dense_3 (Dense)	(None, 1)	513



```
=====
Total params: 62,982,145
Trainable params: 62,982,081
Non-trainable params: 64
-----
```

```
[ ]: discriminator=create_discriminator()
      prediction=discriminator(generated_image)
      print (prediction)
```

```
tf.Tensor([[0.48833314]], shape=(1, 1), dtype=float32)
```

```
[ ]: # Creation d'un jeu de données de vraies images
      # les vraies images sont labélisées avec 1
      def generate_real_samples(dataset, nb_images):
          # tirage aléatoire
          xi = randint(0, dataset.shape[0], nb_images)
          # sélection des images
          X = dataset[xi]
          # mettre 1 comme label de classe
          y = ones((nb_images, 1))
          return X, y

      # Création d'un faux jeu de données
      # elles seront labélisées avec 0
      def generate_fake_samples(nb_images):
          # generation de nombres aléatoires entre 0 et 1
          # attention ici on simplifie en mettant la taille de l'image
          # normalement il faut prendre latent_dim
          X = np.random.rand(124 * 124 * nb_images * 3)
          # reshape en images grises (couleur !!!)
          X = X.reshape((nb_images, 124, 124, 3))
          # mettre 0 comme label de classe
          y = zeros((nb_images, 1))
          return X, y
```

```
[ ]: # train the discriminator model
      def train_discriminator(model, dataset, epochs=100, batchsize=256):
          # on constitue un jeu de données de batchsize/2 images réelles et images
          ↪ fausses
          half_batch = int(batchsize / 2)
          # boucler sur les epochs
          for i in range(epochs):
              # sélection d'images réelles
              X_real, y_real = generate_real_samples(dataset, half_batch)
              # mettre à jour le discriminateur avec les images réelles
```

```

_, real_acc = model.train_on_batch(X_real, y_real)
# generation de fausses images
X_fake, y_fake = generate_fake_samples(half_batch)
# mise à jour du discriminateur avec de fausses images
_, fake_acc = model.train_on_batch(X_fake, y_fake)
# Affichage des résultats pour l'accuracy des vraies et des
↳ fausses
print('>%d accuracy_real=%.0f%% accuracy_fake=%.0f%%' % (i+1,
↳ real_acc*100, fake_acc*100))

```

```

[ ]: %pwd

nb_images_total=256 # 128 images de chaque classe
epochs=50

# chargement du modèle
model = create_discriminator()

# chargement des données
dataset=load_data()

# lancement de l'entraînement du discriminateur
train_discriminator(model, dataset, epochs, nb_images_total)

```

```

>1 accuracy_real=58% accuracy_fake=0%
>2 accuracy_real=75% accuracy_fake=100%
>3 accuracy_real=59% accuracy_fake=100%
>4 accuracy_real=60% accuracy_fake=100%
>5 accuracy_real=62% accuracy_fake=100%
>6 accuracy_real=76% accuracy_fake=100%
>7 accuracy_real=94% accuracy_fake=100%
>8 accuracy_real=97% accuracy_fake=100%
>9 accuracy_real=98% accuracy_fake=100%
>10 accuracy_real=100% accuracy_fake=100%
>11 accuracy_real=100% accuracy_fake=100%
>12 accuracy_real=100% accuracy_fake=100%
>13 accuracy_real=100% accuracy_fake=68%
>14 accuracy_real=100% accuracy_fake=100%
>15 accuracy_real=100% accuracy_fake=100%
>16 accuracy_real=100% accuracy_fake=100%
>17 accuracy_real=98% accuracy_fake=100%
>18 accuracy_real=98% accuracy_fake=100%
>19 accuracy_real=99% accuracy_fake=100%
>20 accuracy_real=95% accuracy_fake=100%
>21 accuracy_real=98% accuracy_fake=100%
>22 accuracy_real=100% accuracy_fake=100%
>23 accuracy_real=99% accuracy_fake=100%

```

```

>24 accuracy_real=100% accuracy_fake=100%
>25 accuracy_real=99% accuracy_fake=100%
>26 accuracy_real=100% accuracy_fake=100%
>27 accuracy_real=100% accuracy_fake=100%
>28 accuracy_real=100% accuracy_fake=100%
>29 accuracy_real=100% accuracy_fake=100%
>30 accuracy_real=100% accuracy_fake=100%
>31 accuracy_real=100% accuracy_fake=100%
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>44 accuracy_real=100% accuracy_fake=100%
>45 accuracy_real=100% accuracy_fake=100%
>46 accuracy_real=100% accuracy_fake=100%
>47 accuracy_real=100% accuracy_fake=100%
>48 accuracy_real=100% accuracy_fake=100%
>49 accuracy_real=100% accuracy_fake=100%
>50 accuracy_real=100% accuracy_fake=100%

```

```

[ ]: def create_gan(generator_model, discriminator_model):
    # mettre les poids du discriminateur non entraine
    discriminator_model.trainable = False
    # un seul modele qui regroupe
    model = Sequential()
    # ajout du generateur
    model.add(generator_model)
    # ajout du discriminateur
    model.add(discriminator_model)

    opt = Adam(learning_rate=0.0003, beta_1=0.5)
    model.compile(loss='binary_crossentropy', optimizer=opt)
    return model

```

Le modèle GAN final ressemble à ceci :

```

[ ]: latent_dim = 100

# creation du generateur
generator_model = create_generator(latent_dim)

```

```

# creation du discriminateur
discriminator_model = create_discriminator()

# creation du gan
gan_model = create_gan(generator_model, discriminator_model)

gan_model.summary()

```

Model: "sequential\_7"

Layer (type)	Output Shape	Param #
sequential_5 (Sequential)	(None, 124, 124, 3)	10577543
sequential_6 (Sequential)	(None, 1)	62982145

=====  
Total params: 73,559,688  
Trainable params: 10,384,831  
Non-trainable params: 63,174,857  
=====

```

[ ]: def generate_latent_points (latent_dim, nb_images):
    X_input = np.random.randn(latent_dim * nb_images)
    X_input = X_input.reshape(nb_images, latent_dim)
    return X_input

def generate_fake_samples_for_generator(generator_model, latent_dim, nb_images):
    # generation des points
    X_input = generate_latent_points (latent_dim,nb_images)
    # prediction de la sortie du générateur
    X = generator_model.predict(X_input)
    # A ce niveau on considère que les images sont fausses
    # donc on met 0 comme label.
    y = zeros((nb_images, 1))
    return X, y

def plot_and_save_generatedimages(generated_images, epoch, nb_images=10):
    # Affichage des images
    for i in range(nb_images * nb_images):
        plt.subplot(nb_images, nb_images, 1 + i)
        plt.axis('off')
        plt.imshow(generated_images[i, :, :])
    # sauvegarde de l'image
    filename = 'generated_plot_Fox_withGan%03d.png' % (epoch+1)
    plt.savefig(filename)
    plt.close()

```

```

def evaluate_model (dataset, epoch, generator_model, discriminator_model,
↳latent_dim, nb_images=100, save_model=True):
    # récupération de vraies images pour le discriminateur
    X_real, y_real = generate_real_samples(dataset, nb_images)
    # Evaluation de l'accuracy pour le discriminateur
    _, acc_real = discriminator_model.evaluate(X_real, y_real, verbose=0)

    # génération de fausses images pour le générateur et donc le gan
    X_fake, y_fake = generate_fake_samples_for_generator(generator_model,
↳latent_dim, nb_images)
    # Evaluation du discriminateur avec des fausses images
    _, acc_fake = discriminator_model.evaluate(X_fake, y_fake, verbose=0)

    print ('Accuracy réelle : %.0f%%, fausse : %.0f%%' % (acc_real*100,
↳acc_fake*100))

    plot_and_save_generatedimages(X_fake, epoch)
    if save_model==True:
        # sauvegarde du generateur pour un autre usage
        filename = 'generator_model_Fox%03d.h5' % (epoch + 1)
        generator_model.save(filename)

```

```

[ ]: # train the generator and discriminator
def train(generator_model, discriminator_model, gan_model, dataset, latent_dim,
↳epochs=100, batchsize=256):
    print("Dataset shape : ", dataset.shape)
    # Pour déterminer combien il y aura de batches analysés à chaque epoch
    batches_per_epoch = int(dataset.shape[0] / batchsize)
    print("Batches_per_epoch : ", batches_per_epoch)

    # checkpoint_generator = tf.train.Checkpoint(generator_model)
    # checkpoint_discriminator = tf.train.Checkpoint(discriminator_model)
    # checkpoint_gan = tf.train.Checkpoint(gan_model)

    # pour récupérer le même nombre d'images fausses et vraies
    half_batch = int(batchsize / 2)

    for i in range(epochs):
        # parcours des batches pour chaque pas d'epoch
        for j in range(batches_per_epoch):
            # PARTIE DISCRIMINATOR
            #tirage aléatoire de half_batch images vraies
            X_real, y_real = generate_real_samples(dataset, half_batch)
            # generation de half_size fausses images

```

```

X_fake, y_fake = generate_fake_samples_for_generator(generator_model,
↳latent_dim, half_batch)
    # vstack permet de concaténer les vraies et fausses images dans X (resp.
↳dans y)
    # on aurait pu utiliser np.concatenate (np.concatenate([X_real, X_fake]))
X, y = vstack((X_real, X_fake)), vstack((y_real, y_fake))

    # la ligne suivante permet au discriminateur de mettre à jour ses poids
    # attention dans le GAN il ne peut pas apprendre donc il ne peut le faire
↳qu'ici
    discriminator_loss, _ = discriminator_model.train_on_batch(X, y)

    # PARTIE GENERATOR ET DONC DE L'ENTREE DU GAN
    # Création des points comme entrée du générateur
    #
    X_for_gan = generate_latent_points(latent_dim, batchsize)
    # On met un 1 pour les labels des fausses images pour faire croire au
↳discriminateur
    # qu'il s'agit de vraies images
    y_for_gan = ones((batchsize, 1))

    # mise à jour des poids du générateur par propagation de l'erreur
    # du discriminateur
    gan_loss = gan_model.train_on_batch(X_for_gan, y_for_gan)
    # Affichage des loss
    print('epoch %d - batch %d/%d, discriminator_loss=%.3f, generator_loss=%.
↳3f'%(i+1, j+1, batches_per_epoch, discriminator_loss, gan_loss))

    # Toutes les 20 epochs evaluation du modèle et sauvegarde du générateur
    if i==1 or i % 20==0:
        evaluate_model (dataset, i, generator_model, discriminator_model,
↳latent_dim, save_model=False)

    if i==1 or i % 250==0:
        #Save checkpoints every 20 iterations
        evaluate_model (dataset, i, generator_model, discriminator_model,
↳latent_dim)
        # save_path = checkpoint_generator.save('/training_checkpoints_gan/
↳generator')
        # save_path = checkpoint_discriminator.save('/training_checkpoints_gan/
↳discriminator')
        # save_path = checkpoint_gan.save('/training_checkpoints_gan/gan')

```

```

[ ]: latent_dim = 100
epochs=1000
batchsize=128

```

```

# Creation du discriminateur
discriminator_model = create_discriminator()
# Creation du generateur
generator_model = create_generator(latent_dim)
# Creation du GAN
gan_model = create_gan(generator_model, discriminator_model)
# Chargement des données
dataset = load_data()

```

```

[ ]: # train model
# Avec batchsize 25, epochs 1000
# model = train(generator_model, discriminator_model, gan_model, dataset,
↳latent_dim, epochs, batchsize)
#print(dataset.shape)

```

```

[ ]: # train model
# Avec batchsize 10, epochs 1000
# model = train(generator_model, discriminator_model, gan_model, dataset,
↳latent_dim, epochs, batchsize)
#print(dataset.shape)

```

```

[ ]: # train model
# Avec batchsize 512, epochs 1000
epochs=2500
batchsize=32
model = train(generator_model, discriminator_model, gan_model, dataset,
↳latent_dim, epochs, batchsize)
#print(dataset.shape)

```

Le flux de sortie a été tronqué et ne contient que les 5000 dernières lignes.

```

1/1 [=====] - 0s 17ms/step
epoch 1682 - batch 1/3, discriminator_loss=0.000, generator_loss=11.220
1/1 [=====] - 0s 17ms/step
epoch 1682 - batch 2/3, discriminator_loss=0.000, generator_loss=11.504
1/1 [=====] - 0s 16ms/step
epoch 1682 - batch 3/3, discriminator_loss=0.062, generator_loss=8.284
1/1 [=====] - 0s 16ms/step
epoch 1683 - batch 1/3, discriminator_loss=0.025, generator_loss=7.014
1/1 [=====] - 0s 15ms/step
epoch 1683 - batch 2/3, discriminator_loss=0.026, generator_loss=4.307
1/1 [=====] - 0s 15ms/step
epoch 1683 - batch 3/3, discriminator_loss=0.002, generator_loss=2.000
1/1 [=====] - 0s 15ms/step
epoch 1684 - batch 1/3, discriminator_loss=0.008, generator_loss=0.345
1/1 [=====] - 0s 15ms/step
epoch 1684 - batch 2/3, discriminator_loss=0.058, generator_loss=0.693
1/1 [=====] - 0s 15ms/step

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epoch 1684 - batch 3/3, discriminator\_loss=0.028, generator\_loss=2.359  
1/1 [=====] - 0s 15ms/step  
epoch 1685 - batch 1/3, discriminator\_loss=0.007, generator\_loss=4.608  
1/1 [=====] - 0s 16ms/step  
epoch 1685 - batch 2/3, discriminator\_loss=0.000, generator\_loss=7.933  
1/1 [=====] - 0s 15ms/step  
epoch 1685 - batch 3/3, discriminator\_loss=0.000, generator\_loss=11.526  
1/1 [=====] - 0s 22ms/step  
epoch 1686 - batch 1/3, discriminator\_loss=0.016, generator\_loss=12.627  
1/1 [=====] - 0s 15ms/step  
epoch 1686 - batch 2/3, discriminator\_loss=0.039, generator\_loss=12.987  
1/1 [=====] - 0s 15ms/step  
epoch 1686 - batch 3/3, discriminator\_loss=0.017, generator\_loss=11.639  
1/1 [=====] - 0s 15ms/step  
epoch 1687 - batch 1/3, discriminator\_loss=0.137, generator\_loss=8.936  
1/1 [=====] - 0s 17ms/step  
epoch 1687 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.236  
1/1 [=====] - 0s 15ms/step  
epoch 1687 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.807  
1/1 [=====] - 0s 15ms/step  
epoch 1688 - batch 1/3, discriminator\_loss=0.002, generator\_loss=0.821  
1/1 [=====] - 0s 15ms/step  
epoch 1688 - batch 2/3, discriminator\_loss=0.005, generator\_loss=0.466  
1/1 [=====] - 0s 15ms/step  
epoch 1688 - batch 3/3, discriminator\_loss=0.052, generator\_loss=0.540  
1/1 [=====] - 0s 21ms/step  
epoch 1689 - batch 1/3, discriminator\_loss=0.068, generator\_loss=2.178  
1/1 [=====] - 0s 18ms/step  
epoch 1689 - batch 2/3, discriminator\_loss=0.008, generator\_loss=5.795  
1/1 [=====] - 0s 15ms/step  
epoch 1689 - batch 3/3, discriminator\_loss=0.002, generator\_loss=9.843  
1/1 [=====] - 0s 15ms/step  
epoch 1690 - batch 1/3, discriminator\_loss=0.000, generator\_loss=13.463  
1/1 [=====] - 0s 15ms/step  
epoch 1690 - batch 2/3, discriminator\_loss=0.085, generator\_loss=11.853  
1/1 [=====] - 0s 17ms/step  
epoch 1690 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.970  
1/1 [=====] - 0s 17ms/step  
epoch 1691 - batch 1/3, discriminator\_loss=0.109, generator\_loss=6.425  
1/1 [=====] - 0s 15ms/step  
epoch 1691 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.110  
1/1 [=====] - 0s 17ms/step  
epoch 1691 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.053  
1/1 [=====] - 0s 15ms/step  
epoch 1692 - batch 1/3, discriminator\_loss=0.005, generator\_loss=0.651  
1/1 [=====] - 0s 15ms/step  
epoch 1692 - batch 2/3, discriminator\_loss=0.001, generator\_loss=0.233  
1/1 [=====] - 0s 15ms/step



epoch 1692 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.185  
1/1 [=====] - 0s 15ms/step  
epoch 1693 - batch 1/3, discriminator\_loss=0.001, generator\_loss=0.140  
1/1 [=====] - 0s 19ms/step  
epoch 1693 - batch 2/3, discriminator\_loss=0.008, generator\_loss=0.153  
1/1 [=====] - 0s 15ms/step  
epoch 1693 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.503  
1/1 [=====] - 0s 15ms/step  
epoch 1694 - batch 1/3, discriminator\_loss=0.115, generator\_loss=1.122  
1/1 [=====] - 0s 15ms/step  
epoch 1694 - batch 2/3, discriminator\_loss=0.074, generator\_loss=1.678  
1/1 [=====] - 0s 15ms/step  
epoch 1694 - batch 3/3, discriminator\_loss=0.000, generator\_loss=7.025  
1/1 [=====] - 0s 18ms/step  
epoch 1695 - batch 1/3, discriminator\_loss=0.001, generator\_loss=14.503  
1/1 [=====] - 0s 17ms/step  
epoch 1695 - batch 2/3, discriminator\_loss=0.000, generator\_loss=21.187  
1/1 [=====] - 0s 16ms/step  
epoch 1695 - batch 3/3, discriminator\_loss=0.000, generator\_loss=22.035  
1/1 [=====] - 0s 16ms/step  
epoch 1696 - batch 1/3, discriminator\_loss=0.000, generator\_loss=27.322  
1/1 [=====] - 0s 15ms/step  
epoch 1696 - batch 2/3, discriminator\_loss=0.000, generator\_loss=30.206  
1/1 [=====] - 0s 17ms/step  
epoch 1696 - batch 3/3, discriminator\_loss=0.411, generator\_loss=31.387  
1/1 [=====] - 0s 16ms/step  
epoch 1697 - batch 1/3, discriminator\_loss=0.453, generator\_loss=25.056  
1/1 [=====] - 0s 16ms/step  
epoch 1697 - batch 2/3, discriminator\_loss=0.091, generator\_loss=18.928  
1/1 [=====] - 0s 19ms/step  
epoch 1697 - batch 3/3, discriminator\_loss=0.000, generator\_loss=13.906  
1/1 [=====] - 0s 15ms/step  
epoch 1698 - batch 1/3, discriminator\_loss=0.000, generator\_loss=9.975  
1/1 [=====] - 0s 15ms/step  
epoch 1698 - batch 2/3, discriminator\_loss=0.000, generator\_loss=7.200  
1/1 [=====] - 0s 15ms/step  
epoch 1698 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.514  
1/1 [=====] - 0s 15ms/step  
epoch 1699 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.555  
1/1 [=====] - 0s 15ms/step  
epoch 1699 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.934  
1/1 [=====] - 0s 15ms/step  
epoch 1699 - batch 3/3, discriminator\_loss=0.055, generator\_loss=1.601  
1/1 [=====] - 0s 16ms/step  
epoch 1700 - batch 1/3, discriminator\_loss=0.017, generator\_loss=2.369  
1/1 [=====] - 0s 15ms/step  
epoch 1700 - batch 2/3, discriminator\_loss=0.001, generator\_loss=3.936  
1/1 [=====] - 0s 15ms/step

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epoch 1700 - batch 3/3, discriminator_loss=0.000, generator_loss=6.519
1/1 [=====] - 0s 14ms/step
epoch 1701 - batch 1/3, discriminator_loss=0.000, generator_loss=13.459
1/1 [=====] - 0s 16ms/step
epoch 1701 - batch 2/3, discriminator_loss=0.000, generator_loss=14.689
1/1 [=====] - 0s 15ms/step
epoch 1701 - batch 3/3, discriminator_loss=0.000, generator_loss=13.472
4/4 [=====] - 0s 51ms/step
Accuracy réelle : 98%, fausse : 100%
1/1 [=====] - 0s 16ms/step
epoch 1702 - batch 1/3, discriminator_loss=0.000, generator_loss=16.229
1/1 [=====] - 0s 15ms/step
epoch 1702 - batch 2/3, discriminator_loss=0.000, generator_loss=17.384
1/1 [=====] - 0s 15ms/step
epoch 1702 - batch 3/3, discriminator_loss=0.000, generator_loss=17.959
1/1 [=====] - 0s 20ms/step
epoch 1703 - batch 1/3, discriminator_loss=0.018, generator_loss=18.964
1/1 [=====] - 0s 16ms/step
epoch 1703 - batch 2/3, discriminator_loss=0.000, generator_loss=17.713
1/1 [=====] - 0s 15ms/step
epoch 1703 - batch 3/3, discriminator_loss=0.033, generator_loss=16.039
1/1 [=====] - 0s 15ms/step
epoch 1704 - batch 1/3, discriminator_loss=0.000, generator_loss=15.004
1/1 [=====] - 0s 17ms/step
epoch 1704 - batch 2/3, discriminator_loss=0.000, generator_loss=12.210
1/1 [=====] - 0s 19ms/step
epoch 1704 - batch 3/3, discriminator_loss=0.002, generator_loss=8.889
1/1 [=====] - 0s 17ms/step
epoch 1705 - batch 1/3, discriminator_loss=0.002, generator_loss=8.653
1/1 [=====] - 0s 17ms/step
epoch 1705 - batch 2/3, discriminator_loss=0.027, generator_loss=9.299
1/1 [=====] - 0s 17ms/step
epoch 1705 - batch 3/3, discriminator_loss=0.001, generator_loss=9.082
1/1 [=====] - 0s 17ms/step
epoch 1706 - batch 1/3, discriminator_loss=0.001, generator_loss=9.241
1/1 [=====] - 0s 15ms/step
epoch 1706 - batch 2/3, discriminator_loss=0.000, generator_loss=9.505
1/1 [=====] - 0s 19ms/step
epoch 1706 - batch 3/3, discriminator_loss=0.003, generator_loss=10.220
1/1 [=====] - 0s 23ms/step
epoch 1707 - batch 1/3, discriminator_loss=0.000, generator_loss=10.459
1/1 [=====] - 0s 15ms/step
epoch 1707 - batch 2/3, discriminator_loss=0.020, generator_loss=12.349
1/1 [=====] - 0s 16ms/step
epoch 1707 - batch 3/3, discriminator_loss=0.001, generator_loss=14.769
1/1 [=====] - 0s 17ms/step
epoch 1708 - batch 1/3, discriminator_loss=0.001, generator_loss=15.701
1/1 [=====] - 0s 15ms/step

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epoch 1708 - batch 2/3, discriminator\_loss=0.000, generator\_loss=15.471  
1/1 [=====] - 0s 15ms/step  
epoch 1708 - batch 3/3, discriminator\_loss=0.032, generator\_loss=13.852  
1/1 [=====] - 0s 15ms/step  
epoch 1709 - batch 1/3, discriminator\_loss=0.000, generator\_loss=14.071  
1/1 [=====] - 0s 16ms/step  
epoch 1709 - batch 2/3, discriminator\_loss=0.000, generator\_loss=9.957  
1/1 [=====] - 0s 17ms/step  
epoch 1709 - batch 3/3, discriminator\_loss=0.008, generator\_loss=8.881  
1/1 [=====] - 0s 15ms/step  
epoch 1710 - batch 1/3, discriminator\_loss=0.002, generator\_loss=7.724  
1/1 [=====] - 0s 19ms/step  
epoch 1710 - batch 2/3, discriminator\_loss=0.001, generator\_loss=7.444  
1/1 [=====] - 0s 15ms/step  
epoch 1710 - batch 3/3, discriminator\_loss=0.037, generator\_loss=7.749  
1/1 [=====] - 0s 16ms/step  
epoch 1711 - batch 1/3, discriminator\_loss=0.003, generator\_loss=8.696  
1/1 [=====] - 0s 17ms/step  
epoch 1711 - batch 2/3, discriminator\_loss=0.001, generator\_loss=8.906  
1/1 [=====] - 0s 15ms/step  
epoch 1711 - batch 3/3, discriminator\_loss=0.003, generator\_loss=9.540  
1/1 [=====] - 0s 17ms/step  
epoch 1712 - batch 1/3, discriminator\_loss=0.008, generator\_loss=11.213  
1/1 [=====] - 0s 17ms/step  
epoch 1712 - batch 2/3, discriminator\_loss=0.006, generator\_loss=12.419  
1/1 [=====] - 0s 15ms/step  
epoch 1712 - batch 3/3, discriminator\_loss=0.018, generator\_loss=11.830  
1/1 [=====] - 0s 18ms/step  
epoch 1713 - batch 1/3, discriminator\_loss=0.003, generator\_loss=8.349  
1/1 [=====] - 0s 18ms/step  
epoch 1713 - batch 2/3, discriminator\_loss=0.000, generator\_loss=10.459  
1/1 [=====] - 0s 16ms/step  
epoch 1713 - batch 3/3, discriminator\_loss=0.005, generator\_loss=9.480  
1/1 [=====] - 0s 15ms/step  
epoch 1714 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.250  
1/1 [=====] - 0s 17ms/step  
epoch 1714 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.641  
1/1 [=====] - 0s 18ms/step  
epoch 1714 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.714  
1/1 [=====] - 0s 15ms/step  
epoch 1715 - batch 1/3, discriminator\_loss=0.002, generator\_loss=3.526  
1/1 [=====] - 0s 15ms/step  
epoch 1715 - batch 2/3, discriminator\_loss=0.001, generator\_loss=2.905  
1/1 [=====] - 0s 15ms/step  
epoch 1715 - batch 3/3, discriminator\_loss=0.004, generator\_loss=3.366  
1/1 [=====] - 0s 15ms/step  
epoch 1716 - batch 1/3, discriminator\_loss=0.001, generator\_loss=3.008  
1/1 [=====] - 0s 15ms/step

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epoch 1716 - batch 2/3, discriminator_loss=0.014, generator_loss=1.879
1/1 [=====] - 0s 15ms/step
epoch 1716 - batch 3/3, discriminator_loss=0.009, generator_loss=1.386
1/1 [=====] - 0s 15ms/step
epoch 1717 - batch 1/3, discriminator_loss=0.004, generator_loss=1.985
1/1 [=====] - 0s 15ms/step
epoch 1717 - batch 2/3, discriminator_loss=0.025, generator_loss=2.696
1/1 [=====] - 0s 16ms/step
epoch 1717 - batch 3/3, discriminator_loss=0.006, generator_loss=4.288
1/1 [=====] - 0s 15ms/step
epoch 1718 - batch 1/3, discriminator_loss=0.000, generator_loss=9.303
1/1 [=====] - 0s 15ms/step
epoch 1718 - batch 2/3, discriminator_loss=0.000, generator_loss=12.230
1/1 [=====] - 0s 16ms/step
epoch 1718 - batch 3/3, discriminator_loss=0.000, generator_loss=13.213
1/1 [=====] - 0s 15ms/step
epoch 1719 - batch 1/3, discriminator_loss=0.000, generator_loss=12.672
1/1 [=====] - 0s 16ms/step
epoch 1719 - batch 2/3, discriminator_loss=0.000, generator_loss=14.561
1/1 [=====] - 0s 18ms/step
epoch 1719 - batch 3/3, discriminator_loss=0.069, generator_loss=14.477
1/1 [=====] - 0s 16ms/step
epoch 1720 - batch 1/3, discriminator_loss=0.000, generator_loss=12.768
1/1 [=====] - 0s 15ms/step
epoch 1720 - batch 2/3, discriminator_loss=0.000, generator_loss=11.751
1/1 [=====] - 0s 16ms/step
epoch 1720 - batch 3/3, discriminator_loss=0.002, generator_loss=11.444
1/1 [=====] - 0s 23ms/step
epoch 1721 - batch 1/3, discriminator_loss=0.001, generator_loss=11.774
1/1 [=====] - 0s 16ms/step
epoch 1721 - batch 2/3, discriminator_loss=0.000, generator_loss=9.315
1/1 [=====] - 0s 16ms/step
epoch 1721 - batch 3/3, discriminator_loss=0.000, generator_loss=10.182
4/4 [=====] - 0s 51ms/step
Accuracy réelle : 100%, fausse : 100%
1/1 [=====] - 0s 16ms/step
epoch 1722 - batch 1/3, discriminator_loss=0.001, generator_loss=11.512
1/1 [=====] - 0s 15ms/step
epoch 1722 - batch 2/3, discriminator_loss=0.001, generator_loss=8.480
1/1 [=====] - 0s 15ms/step
epoch 1722 - batch 3/3, discriminator_loss=0.000, generator_loss=10.667
1/1 [=====] - 0s 15ms/step
epoch 1723 - batch 1/3, discriminator_loss=0.003, generator_loss=10.232
1/1 [=====] - 0s 19ms/step
epoch 1723 - batch 2/3, discriminator_loss=0.005, generator_loss=9.647
1/1 [=====] - 0s 15ms/step
epoch 1723 - batch 3/3, discriminator_loss=0.020, generator_loss=9.973
1/1 [=====] - 0s 15ms/step

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epoch 1724 - batch 1/3, discriminator\_loss=0.006, generator\_loss=12.975  
1/1 [=====] - 0s 18ms/step  
epoch 1724 - batch 2/3, discriminator\_loss=0.023, generator\_loss=13.095  
1/1 [=====] - 0s 21ms/step  
epoch 1724 - batch 3/3, discriminator\_loss=0.001, generator\_loss=12.418  
1/1 [=====] - 0s 17ms/step  
epoch 1725 - batch 1/3, discriminator\_loss=0.003, generator\_loss=11.552  
1/1 [=====] - 0s 15ms/step  
epoch 1725 - batch 2/3, discriminator\_loss=0.004, generator\_loss=11.466  
1/1 [=====] - 0s 15ms/step  
epoch 1725 - batch 3/3, discriminator\_loss=0.027, generator\_loss=13.563  
1/1 [=====] - 0s 16ms/step  
epoch 1726 - batch 1/3, discriminator\_loss=0.017, generator\_loss=15.029  
1/1 [=====] - 0s 16ms/step  
epoch 1726 - batch 2/3, discriminator\_loss=0.000, generator\_loss=13.250  
1/1 [=====] - 0s 18ms/step  
epoch 1726 - batch 3/3, discriminator\_loss=0.101, generator\_loss=16.076  
1/1 [=====] - 0s 15ms/step  
epoch 1727 - batch 1/3, discriminator\_loss=0.000, generator\_loss=17.746  
1/1 [=====] - 0s 16ms/step  
epoch 1727 - batch 2/3, discriminator\_loss=0.033, generator\_loss=18.824  
1/1 [=====] - 0s 15ms/step  
epoch 1727 - batch 3/3, discriminator\_loss=0.010, generator\_loss=18.420  
1/1 [=====] - 0s 16ms/step  
epoch 1728 - batch 1/3, discriminator\_loss=0.097, generator\_loss=11.512  
1/1 [=====] - 0s 15ms/step  
epoch 1728 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.757  
1/1 [=====] - 0s 18ms/step  
epoch 1728 - batch 3/3, discriminator\_loss=0.000, generator\_loss=7.842  
1/1 [=====] - 0s 16ms/step  
epoch 1729 - batch 1/3, discriminator\_loss=0.003, generator\_loss=3.251  
1/1 [=====] - 0s 15ms/step  
epoch 1729 - batch 2/3, discriminator\_loss=0.059, generator\_loss=5.366  
1/1 [=====] - 0s 19ms/step  
epoch 1729 - batch 3/3, discriminator\_loss=0.001, generator\_loss=7.012  
1/1 [=====] - 0s 22ms/step  
epoch 1730 - batch 1/3, discriminator\_loss=0.000, generator\_loss=9.727  
1/1 [=====] - 0s 16ms/step  
epoch 1730 - batch 2/3, discriminator\_loss=0.005, generator\_loss=8.525  
1/1 [=====] - 0s 16ms/step  
epoch 1730 - batch 3/3, discriminator\_loss=0.005, generator\_loss=12.101  
1/1 [=====] - 0s 15ms/step  
epoch 1731 - batch 1/3, discriminator\_loss=0.028, generator\_loss=9.619  
1/1 [=====] - 0s 18ms/step  
epoch 1731 - batch 2/3, discriminator\_loss=0.009, generator\_loss=5.735  
1/1 [=====] - 0s 17ms/step  
epoch 1731 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.244  
1/1 [=====] - 0s 15ms/step

epoch 1732 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.570  
 1/1 [=====] - 0s 15ms/step  
 epoch 1732 - batch 2/3, discriminator\_loss=0.002, generator\_loss=2.138  
 1/1 [=====] - 0s 15ms/step  
 epoch 1732 - batch 3/3, discriminator\_loss=0.001, generator\_loss=1.122  
 1/1 [=====] - 0s 16ms/step  
 epoch 1733 - batch 1/3, discriminator\_loss=0.001, generator\_loss=0.901  
 1/1 [=====] - 0s 17ms/step  
 epoch 1733 - batch 2/3, discriminator\_loss=0.031, generator\_loss=0.766  
 1/1 [=====] - 0s 16ms/step  
 epoch 1733 - batch 3/3, discriminator\_loss=0.001, generator\_loss=1.740  
 1/1 [=====] - 0s 15ms/step  
 epoch 1734 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.659  
 1/1 [=====] - 0s 17ms/step  
 epoch 1734 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.136  
 1/1 [=====] - 0s 16ms/step  
 epoch 1734 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.034  
 1/1 [=====] - 0s 19ms/step  
 epoch 1735 - batch 1/3, discriminator\_loss=0.003, generator\_loss=3.852  
 1/1 [=====] - 0s 17ms/step  
 epoch 1735 - batch 2/3, discriminator\_loss=0.002, generator\_loss=4.807  
 1/1 [=====] - 0s 16ms/step  
 epoch 1735 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.399  
 1/1 [=====] - 0s 16ms/step  
 epoch 1736 - batch 1/3, discriminator\_loss=0.003, generator\_loss=7.296  
 1/1 [=====] - 0s 16ms/step  
 epoch 1736 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.728  
 1/1 [=====] - 0s 16ms/step  
 epoch 1736 - batch 3/3, discriminator\_loss=0.119, generator\_loss=3.273  
 1/1 [=====] - 0s 15ms/step  
 epoch 1737 - batch 1/3, discriminator\_loss=0.003, generator\_loss=0.977  
 1/1 [=====] - 0s 16ms/step  
 epoch 1737 - batch 2/3, discriminator\_loss=0.002, generator\_loss=0.533  
 1/1 [=====] - 0s 16ms/step  
 epoch 1737 - batch 3/3, discriminator\_loss=0.001, generator\_loss=0.159  
 1/1 [=====] - 0s 17ms/step  
 epoch 1738 - batch 1/3, discriminator\_loss=0.114, generator\_loss=0.625  
 1/1 [=====] - 0s 15ms/step  
 epoch 1738 - batch 2/3, discriminator\_loss=0.021, generator\_loss=0.877  
 1/1 [=====] - 0s 15ms/step  
 epoch 1738 - batch 3/3, discriminator\_loss=0.003, generator\_loss=2.135  
 1/1 [=====] - 0s 15ms/step  
 epoch 1739 - batch 1/3, discriminator\_loss=0.000, generator\_loss=4.446  
 1/1 [=====] - 0s 19ms/step  
 epoch 1739 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.088  
 1/1 [=====] - 0s 18ms/step  
 epoch 1739 - batch 3/3, discriminator\_loss=0.000, generator\_loss=10.467  
 1/1 [=====] - 0s 16ms/step

epoch 1740 - batch 1/3, discriminator\_loss=0.000, generator\_loss=12.866  
 1/1 [=====] - 0s 16ms/step  
 epoch 1740 - batch 2/3, discriminator\_loss=0.000, generator\_loss=12.780  
 1/1 [=====] - 0s 18ms/step  
 epoch 1740 - batch 3/3, discriminator\_loss=0.002, generator\_loss=14.246  
 1/1 [=====] - 0s 17ms/step  
 epoch 1741 - batch 1/3, discriminator\_loss=0.000, generator\_loss=14.994  
 1/1 [=====] - 0s 15ms/step  
 epoch 1741 - batch 2/3, discriminator\_loss=0.174, generator\_loss=14.674  
 1/1 [=====] - 0s 15ms/step  
 epoch 1741 - batch 3/3, discriminator\_loss=0.020, generator\_loss=11.550  
 4/4 [=====] - 0s 50ms/step  
 Accuracy réelle : 100%, fausse : 100%  
 1/1 [=====] - 0s 16ms/step  
 epoch 1742 - batch 1/3, discriminator\_loss=0.000, generator\_loss=9.698  
 1/1 [=====] - 0s 23ms/step  
 epoch 1742 - batch 2/3, discriminator\_loss=0.001, generator\_loss=6.798  
 1/1 [=====] - 0s 18ms/step  
 epoch 1742 - batch 3/3, discriminator\_loss=0.001, generator\_loss=5.576  
 1/1 [=====] - 0s 15ms/step  
 epoch 1743 - batch 1/3, discriminator\_loss=0.000, generator\_loss=3.238  
 1/1 [=====] - 0s 15ms/step  
 epoch 1743 - batch 2/3, discriminator\_loss=0.004, generator\_loss=2.163  
 1/1 [=====] - 0s 15ms/step  
 epoch 1743 - batch 3/3, discriminator\_loss=0.024, generator\_loss=2.067  
 1/1 [=====] - 0s 15ms/step  
 epoch 1744 - batch 1/3, discriminator\_loss=0.002, generator\_loss=1.779  
 1/1 [=====] - 0s 16ms/step  
 epoch 1744 - batch 2/3, discriminator\_loss=0.001, generator\_loss=1.189  
 1/1 [=====] - 0s 16ms/step  
 epoch 1744 - batch 3/3, discriminator\_loss=0.001, generator\_loss=1.775  
 1/1 [=====] - 0s 18ms/step  
 epoch 1745 - batch 1/3, discriminator\_loss=0.001, generator\_loss=1.614  
 1/1 [=====] - 0s 15ms/step  
 epoch 1745 - batch 2/3, discriminator\_loss=0.003, generator\_loss=1.304  
 1/1 [=====] - 0s 16ms/step  
 epoch 1745 - batch 3/3, discriminator\_loss=0.017, generator\_loss=3.253  
 1/1 [=====] - 0s 17ms/step  
 epoch 1746 - batch 1/3, discriminator\_loss=0.000, generator\_loss=3.467  
 1/1 [=====] - 0s 15ms/step  
 epoch 1746 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.221  
 1/1 [=====] - 0s 16ms/step  
 epoch 1746 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.930  
 1/1 [=====] - 0s 15ms/step  
 epoch 1747 - batch 1/3, discriminator\_loss=0.000, generator\_loss=8.343  
 1/1 [=====] - 0s 16ms/step  
 epoch 1747 - batch 2/3, discriminator\_loss=0.000, generator\_loss=11.553  
 1/1 [=====] - 0s 15ms/step

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epoch 1747 - batch 3/3, discriminator_loss=0.000, generator_loss=9.457
1/1 [=====] - 0s 15ms/step
epoch 1748 - batch 1/3, discriminator_loss=0.000, generator_loss=10.573
1/1 [=====] - 0s 15ms/step
epoch 1748 - batch 2/3, discriminator_loss=0.000, generator_loss=9.796
1/1 [=====] - 0s 15ms/step
epoch 1748 - batch 3/3, discriminator_loss=0.000, generator_loss=9.786
1/1 [=====] - 0s 17ms/step
epoch 1749 - batch 1/3, discriminator_loss=0.000, generator_loss=8.341
1/1 [=====] - 0s 22ms/step
epoch 1749 - batch 2/3, discriminator_loss=0.005, generator_loss=8.800
1/1 [=====] - 0s 15ms/step
epoch 1749 - batch 3/3, discriminator_loss=0.004, generator_loss=8.092
1/1 [=====] - 0s 16ms/step
epoch 1750 - batch 1/3, discriminator_loss=0.000, generator_loss=7.920
1/1 [=====] - 0s 15ms/step
epoch 1750 - batch 2/3, discriminator_loss=0.003, generator_loss=7.154
1/1 [=====] - 0s 15ms/step
epoch 1750 - batch 3/3, discriminator_loss=0.000, generator_loss=5.148
1/1 [=====] - 0s 16ms/step
epoch 1751 - batch 1/3, discriminator_loss=0.044, generator_loss=3.390
1/1 [=====] - 0s 15ms/step
epoch 1751 - batch 2/3, discriminator_loss=0.000, generator_loss=2.345
1/1 [=====] - 0s 15ms/step
epoch 1751 - batch 3/3, discriminator_loss=0.000, generator_loss=0.192
4/4 [=====] - 0s 51ms/step
Accuracy réelle : 100%, fausse : 40%
1/1 [=====] - 0s 23ms/step
epoch 1752 - batch 1/3, discriminator_loss=0.001, generator_loss=0.465
1/1 [=====] - 0s 16ms/step
epoch 1752 - batch 2/3, discriminator_loss=0.009, generator_loss=0.291
1/1 [=====] - 0s 15ms/step
epoch 1752 - batch 3/3, discriminator_loss=0.018, generator_loss=0.368
1/1 [=====] - 0s 15ms/step
epoch 1753 - batch 1/3, discriminator_loss=0.002, generator_loss=0.460
1/1 [=====] - 0s 15ms/step
epoch 1753 - batch 2/3, discriminator_loss=0.005, generator_loss=0.809
1/1 [=====] - 0s 15ms/step
epoch 1753 - batch 3/3, discriminator_loss=0.002, generator_loss=1.032
1/1 [=====] - 0s 19ms/step
epoch 1754 - batch 1/3, discriminator_loss=0.002, generator_loss=1.405
1/1 [=====] - 0s 15ms/step
epoch 1754 - batch 2/3, discriminator_loss=0.000, generator_loss=2.074
1/1 [=====] - 0s 15ms/step
epoch 1754 - batch 3/3, discriminator_loss=0.001, generator_loss=4.357
1/1 [=====] - 0s 19ms/step
epoch 1755 - batch 1/3, discriminator_loss=0.000, generator_loss=7.082
1/1 [=====] - 0s 15ms/step

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epoch 1755 - batch 2/3, discriminator\_loss=0.000, generator\_loss=9.228  
 1/1 [=====] - 0s 15ms/step  
 epoch 1755 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.415  
 1/1 [=====] - 0s 18ms/step  
 epoch 1756 - batch 1/3, discriminator\_loss=0.000, generator\_loss=10.689  
 1/1 [=====] - 0s 18ms/step  
 epoch 1756 - batch 2/3, discriminator\_loss=0.000, generator\_loss=7.398  
 1/1 [=====] - 0s 16ms/step  
 epoch 1756 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.613  
 1/1 [=====] - 0s 15ms/step  
 epoch 1757 - batch 1/3, discriminator\_loss=0.004, generator\_loss=6.752  
 1/1 [=====] - 0s 19ms/step  
 epoch 1757 - batch 2/3, discriminator\_loss=0.003, generator\_loss=8.513  
 1/1 [=====] - 0s 17ms/step  
 epoch 1757 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.022  
 1/1 [=====] - 0s 18ms/step  
 epoch 1758 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.407  
 1/1 [=====] - 0s 15ms/step  
 epoch 1758 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.766  
 1/1 [=====] - 0s 15ms/step  
 epoch 1758 - batch 3/3, discriminator\_loss=0.000, generator\_loss=7.299  
 1/1 [=====] - 0s 16ms/step  
 epoch 1759 - batch 1/3, discriminator\_loss=0.001, generator\_loss=5.535  
 1/1 [=====] - 0s 24ms/step  
 epoch 1759 - batch 2/3, discriminator\_loss=0.001, generator\_loss=5.427  
 1/1 [=====] - 0s 15ms/step  
 epoch 1759 - batch 3/3, discriminator\_loss=0.002, generator\_loss=4.041  
 1/1 [=====] - 0s 30ms/step  
 epoch 1760 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.330  
 1/1 [=====] - 0s 19ms/step  
 epoch 1760 - batch 2/3, discriminator\_loss=0.299, generator\_loss=7.553  
 1/1 [=====] - 0s 15ms/step  
 epoch 1760 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.577  
 1/1 [=====] - 0s 15ms/step  
 epoch 1761 - batch 1/3, discriminator\_loss=0.003, generator\_loss=9.145  
 1/1 [=====] - 0s 17ms/step  
 epoch 1761 - batch 2/3, discriminator\_loss=0.011, generator\_loss=10.683  
 1/1 [=====] - 0s 17ms/step  
 epoch 1761 - batch 3/3, discriminator\_loss=0.021, generator\_loss=5.866  
 4/4 [=====] - 0s 51ms/step  
 Accuracy réelle : 100%, fausse : 98%  
 1/1 [=====] - 0s 15ms/step  
 epoch 1762 - batch 1/3, discriminator\_loss=0.001, generator\_loss=5.207  
 1/1 [=====] - 0s 15ms/step  
 epoch 1762 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.491  
 1/1 [=====] - 0s 15ms/step  
 epoch 1762 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.661  
 1/1 [=====] - 0s 16ms/step

epoch 1763 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.111  
 1/1 [=====] - 0s 15ms/step  
 epoch 1763 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.449  
 1/1 [=====] - 0s 15ms/step  
 epoch 1763 - batch 3/3, discriminator\_loss=0.005, generator\_loss=0.361  
 1/1 [=====] - 0s 15ms/step  
 epoch 1764 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.363  
 1/1 [=====] - 0s 18ms/step  
 epoch 1764 - batch 2/3, discriminator\_loss=0.017, generator\_loss=0.328  
 1/1 [=====] - 0s 15ms/step  
 epoch 1764 - batch 3/3, discriminator\_loss=0.001, generator\_loss=0.933  
 1/1 [=====] - 0s 18ms/step  
 epoch 1765 - batch 1/3, discriminator\_loss=0.002, generator\_loss=0.707  
 1/1 [=====] - 0s 15ms/step  
 epoch 1765 - batch 2/3, discriminator\_loss=0.004, generator\_loss=1.420  
 1/1 [=====] - 0s 17ms/step  
 epoch 1765 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.220  
 1/1 [=====] - 0s 16ms/step  
 epoch 1766 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.415  
 1/1 [=====] - 0s 15ms/step  
 epoch 1766 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.219  
 1/1 [=====] - 0s 17ms/step  
 epoch 1766 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.710  
 1/1 [=====] - 0s 16ms/step  
 epoch 1767 - batch 1/3, discriminator\_loss=0.008, generator\_loss=7.114  
 1/1 [=====] - 0s 17ms/step  
 epoch 1767 - batch 2/3, discriminator\_loss=0.022, generator\_loss=3.771  
 1/1 [=====] - 0s 15ms/step  
 epoch 1767 - batch 3/3, discriminator\_loss=0.156, generator\_loss=5.121  
 1/1 [=====] - 0s 16ms/step  
 epoch 1768 - batch 1/3, discriminator\_loss=0.002, generator\_loss=2.326  
 1/1 [=====] - 0s 17ms/step  
 epoch 1768 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.126  
 1/1 [=====] - 0s 17ms/step  
 epoch 1768 - batch 3/3, discriminator\_loss=0.002, generator\_loss=1.436  
 1/1 [=====] - 0s 17ms/step  
 epoch 1769 - batch 1/3, discriminator\_loss=0.001, generator\_loss=0.406  
 1/1 [=====] - 0s 16ms/step  
 epoch 1769 - batch 2/3, discriminator\_loss=0.001, generator\_loss=0.575  
 1/1 [=====] - 0s 17ms/step  
 epoch 1769 - batch 3/3, discriminator\_loss=0.002, generator\_loss=0.485  
 1/1 [=====] - 0s 19ms/step  
 epoch 1770 - batch 1/3, discriminator\_loss=0.040, generator\_loss=1.296  
 1/1 [=====] - 0s 16ms/step  
 epoch 1770 - batch 2/3, discriminator\_loss=0.002, generator\_loss=2.821  
 1/1 [=====] - 0s 15ms/step  
 epoch 1770 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.698  
 1/1 [=====] - 0s 15ms/step

epoch 1771 - batch 1/3, discriminator\_loss=0.011, generator\_loss=9.423  
1/1 [=====] - 0s 15ms/step  
epoch 1771 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.175  
1/1 [=====] - 0s 16ms/step  
epoch 1771 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.625  
1/1 [=====] - 0s 16ms/step  
epoch 1772 - batch 1/3, discriminator\_loss=0.000, generator\_loss=8.477  
1/1 [=====] - 0s 16ms/step  
epoch 1772 - batch 2/3, discriminator\_loss=0.043, generator\_loss=8.113  
1/1 [=====] - 0s 16ms/step  
epoch 1772 - batch 3/3, discriminator\_loss=0.009, generator\_loss=3.985  
1/1 [=====] - 0s 15ms/step  
epoch 1773 - batch 1/3, discriminator\_loss=0.001, generator\_loss=3.898  
1/1 [=====] - 0s 15ms/step  
epoch 1773 - batch 2/3, discriminator\_loss=0.002, generator\_loss=3.754  
1/1 [=====] - 0s 18ms/step  
epoch 1773 - batch 3/3, discriminator\_loss=0.002, generator\_loss=1.647  
1/1 [=====] - 0s 15ms/step  
epoch 1774 - batch 1/3, discriminator\_loss=0.001, generator\_loss=1.582  
1/1 [=====] - 0s 18ms/step  
epoch 1774 - batch 2/3, discriminator\_loss=0.001, generator\_loss=1.317  
1/1 [=====] - 0s 16ms/step  
epoch 1774 - batch 3/3, discriminator\_loss=0.015, generator\_loss=1.856  
1/1 [=====] - 0s 16ms/step  
epoch 1775 - batch 1/3, discriminator\_loss=0.027, generator\_loss=3.939  
1/1 [=====] - 0s 16ms/step  
epoch 1775 - batch 2/3, discriminator\_loss=0.000, generator\_loss=7.630  
1/1 [=====] - 0s 18ms/step  
epoch 1775 - batch 3/3, discriminator\_loss=0.002, generator\_loss=8.872  
1/1 [=====] - 0s 17ms/step  
epoch 1776 - batch 1/3, discriminator\_loss=0.001, generator\_loss=10.626  
1/1 [=====] - 0s 16ms/step  
epoch 1776 - batch 2/3, discriminator\_loss=0.000, generator\_loss=11.169  
1/1 [=====] - 0s 17ms/step  
epoch 1776 - batch 3/3, discriminator\_loss=0.000, generator\_loss=13.801  
1/1 [=====] - 0s 26ms/step  
epoch 1777 - batch 1/3, discriminator\_loss=0.000, generator\_loss=14.476  
1/1 [=====] - 0s 16ms/step  
epoch 1777 - batch 2/3, discriminator\_loss=0.001, generator\_loss=14.271  
1/1 [=====] - 0s 19ms/step  
epoch 1777 - batch 3/3, discriminator\_loss=0.000, generator\_loss=15.195  
1/1 [=====] - 0s 15ms/step  
epoch 1778 - batch 1/3, discriminator\_loss=0.000, generator\_loss=17.946  
1/1 [=====] - 0s 15ms/step  
epoch 1778 - batch 2/3, discriminator\_loss=0.005, generator\_loss=16.878  
1/1 [=====] - 0s 22ms/step  
epoch 1778 - batch 3/3, discriminator\_loss=0.000, generator\_loss=16.713  
1/1 [=====] - 0s 16ms/step

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epoch 1779 - batch 1/3, discriminator_loss=0.009, generator_loss=16.932
1/1 [=====] - 0s 15ms/step
epoch 1779 - batch 2/3, discriminator_loss=0.001, generator_loss=15.397
1/1 [=====] - 0s 19ms/step
epoch 1779 - batch 3/3, discriminator_loss=0.170, generator_loss=10.171
1/1 [=====] - 0s 15ms/step
epoch 1780 - batch 1/3, discriminator_loss=0.000, generator_loss=7.278
1/1 [=====] - 0s 18ms/step
epoch 1780 - batch 2/3, discriminator_loss=0.000, generator_loss=3.824
1/1 [=====] - 0s 15ms/step
epoch 1780 - batch 3/3, discriminator_loss=0.000, generator_loss=2.001
1/1 [=====] - 0s 25ms/step
epoch 1781 - batch 1/3, discriminator_loss=0.008, generator_loss=0.401
1/1 [=====] - 0s 15ms/step
epoch 1781 - batch 2/3, discriminator_loss=0.019, generator_loss=0.135
1/1 [=====] - 0s 15ms/step
epoch 1781 - batch 3/3, discriminator_loss=0.013, generator_loss=0.239
4/4 [=====] - 0s 51ms/step
Accuracy réelle : 100%, fausse : 15%
1/1 [=====] - 0s 18ms/step
epoch 1782 - batch 1/3, discriminator_loss=0.073, generator_loss=0.721
1/1 [=====] - 0s 15ms/step
epoch 1782 - batch 2/3, discriminator_loss=0.009, generator_loss=1.952
1/1 [=====] - 0s 16ms/step
epoch 1782 - batch 3/3, discriminator_loss=0.004, generator_loss=4.285
1/1 [=====] - 0s 16ms/step
epoch 1783 - batch 1/3, discriminator_loss=0.001, generator_loss=7.464
1/1 [=====] - 0s 15ms/step
epoch 1783 - batch 2/3, discriminator_loss=0.000, generator_loss=12.220
1/1 [=====] - 0s 16ms/step
epoch 1783 - batch 3/3, discriminator_loss=0.000, generator_loss=13.680
1/1 [=====] - 0s 16ms/step
epoch 1784 - batch 1/3, discriminator_loss=0.000, generator_loss=15.369
1/1 [=====] - 0s 15ms/step
epoch 1784 - batch 2/3, discriminator_loss=0.000, generator_loss=18.058
1/1 [=====] - 0s 15ms/step
epoch 1784 - batch 3/3, discriminator_loss=0.000, generator_loss=16.598
1/1 [=====] - 0s 16ms/step
epoch 1785 - batch 1/3, discriminator_loss=0.088, generator_loss=15.320
1/1 [=====] - 0s 15ms/step
epoch 1785 - batch 2/3, discriminator_loss=0.475, generator_loss=5.958
1/1 [=====] - 0s 15ms/step
epoch 1785 - batch 3/3, discriminator_loss=0.000, generator_loss=1.135
1/1 [=====] - 0s 15ms/step
epoch 1786 - batch 1/3, discriminator_loss=0.001, generator_loss=0.034
1/1 [=====] - 0s 17ms/step
epoch 1786 - batch 2/3, discriminator_loss=0.001, generator_loss=0.072
1/1 [=====] - 0s 20ms/step

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epoch 1786 - batch 3/3, discriminator\_loss=0.366, generator\_loss=0.838  
 1/1 [=====] - 0s 15ms/step  
 epoch 1787 - batch 1/3, discriminator\_loss=0.003, generator\_loss=2.056  
 1/1 [=====] - 0s 17ms/step  
 epoch 1787 - batch 2/3, discriminator\_loss=0.021, generator\_loss=8.621  
 1/1 [=====] - 0s 18ms/step  
 epoch 1787 - batch 3/3, discriminator\_loss=0.000, generator\_loss=15.842  
 1/1 [=====] - 0s 17ms/step  
 epoch 1788 - batch 1/3, discriminator\_loss=0.186, generator\_loss=20.191  
 1/1 [=====] - 0s 16ms/step  
 epoch 1788 - batch 2/3, discriminator\_loss=0.000, generator\_loss=21.974  
 1/1 [=====] - 0s 16ms/step  
 epoch 1788 - batch 3/3, discriminator\_loss=0.005, generator\_loss=23.062  
 1/1 [=====] - 0s 16ms/step  
 epoch 1789 - batch 1/3, discriminator\_loss=0.008, generator\_loss=23.223  
 1/1 [=====] - 0s 20ms/step  
 epoch 1789 - batch 2/3, discriminator\_loss=0.000, generator\_loss=24.983  
 1/1 [=====] - 0s 16ms/step  
 epoch 1789 - batch 3/3, discriminator\_loss=0.000, generator\_loss=25.084  
 1/1 [=====] - 0s 16ms/step  
 epoch 1790 - batch 1/3, discriminator\_loss=0.000, generator\_loss=24.978  
 1/1 [=====] - 0s 16ms/step  
 epoch 1790 - batch 2/3, discriminator\_loss=0.237, generator\_loss=21.356  
 1/1 [=====] - 0s 17ms/step  
 epoch 1790 - batch 3/3, discriminator\_loss=0.000, generator\_loss=18.677  
 1/1 [=====] - 0s 15ms/step  
 epoch 1791 - batch 1/3, discriminator\_loss=0.376, generator\_loss=12.216  
 1/1 [=====] - 0s 15ms/step  
 epoch 1791 - batch 2/3, discriminator\_loss=0.001, generator\_loss=6.191  
 1/1 [=====] - 0s 16ms/step  
 epoch 1791 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.709  
 1/1 [=====] - 0s 18ms/step  
 epoch 1792 - batch 1/3, discriminator\_loss=0.013, generator\_loss=0.960  
 1/1 [=====] - 0s 17ms/step  
 epoch 1792 - batch 2/3, discriminator\_loss=0.007, generator\_loss=0.466  
 1/1 [=====] - 0s 16ms/step  
 epoch 1792 - batch 3/3, discriminator\_loss=0.004, generator\_loss=0.165  
 1/1 [=====] - 0s 15ms/step  
 epoch 1793 - batch 1/3, discriminator\_loss=0.019, generator\_loss=0.021  
 1/1 [=====] - 0s 16ms/step  
 epoch 1793 - batch 2/3, discriminator\_loss=0.006, generator\_loss=0.413  
 1/1 [=====] - 0s 16ms/step  
 epoch 1793 - batch 3/3, discriminator\_loss=0.464, generator\_loss=2.365  
 1/1 [=====] - 0s 16ms/step  
 epoch 1794 - batch 1/3, discriminator\_loss=0.008, generator\_loss=8.813  
 1/1 [=====] - 0s 15ms/step  
 epoch 1794 - batch 2/3, discriminator\_loss=0.000, generator\_loss=24.032  
 1/1 [=====] - 0s 16ms/step

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epoch 1794 - batch 3/3, discriminator_loss=0.000, generator_loss=42.016
1/1 [=====] - 0s 16ms/step
epoch 1795 - batch 1/3, discriminator_loss=0.000, generator_loss=24.134
1/1 [=====] - 0s 15ms/step
epoch 1795 - batch 2/3, discriminator_loss=0.007, generator_loss=26.013
1/1 [=====] - 0s 16ms/step
epoch 1795 - batch 3/3, discriminator_loss=0.001, generator_loss=27.148
1/1 [=====] - 0s 16ms/step
epoch 1796 - batch 1/3, discriminator_loss=0.152, generator_loss=25.875
1/1 [=====] - 0s 18ms/step
epoch 1796 - batch 2/3, discriminator_loss=0.000, generator_loss=24.220
1/1 [=====] - 0s 16ms/step
epoch 1796 - batch 3/3, discriminator_loss=0.000, generator_loss=22.542
1/1 [=====] - 0s 15ms/step
epoch 1797 - batch 1/3, discriminator_loss=0.009, generator_loss=20.974
1/1 [=====] - 0s 16ms/step
epoch 1797 - batch 2/3, discriminator_loss=0.899, generator_loss=15.154
1/1 [=====] - 0s 18ms/step
epoch 1797 - batch 3/3, discriminator_loss=0.000, generator_loss=8.620
1/1 [=====] - 0s 18ms/step
epoch 1798 - batch 1/3, discriminator_loss=0.000, generator_loss=3.734
1/1 [=====] - 0s 18ms/step
epoch 1798 - batch 2/3, discriminator_loss=0.000, generator_loss=2.940
1/1 [=====] - 0s 16ms/step
epoch 1798 - batch 3/3, discriminator_loss=0.150, generator_loss=0.335
1/1 [=====] - 0s 18ms/step
epoch 1799 - batch 1/3, discriminator_loss=0.484, generator_loss=0.553
1/1 [=====] - 0s 15ms/step
epoch 1799 - batch 2/3, discriminator_loss=0.001, generator_loss=0.421
1/1 [=====] - 0s 15ms/step
epoch 1799 - batch 3/3, discriminator_loss=0.009, generator_loss=0.966
1/1 [=====] - 0s 15ms/step
epoch 1800 - batch 1/3, discriminator_loss=0.000, generator_loss=1.463
1/1 [=====] - 0s 19ms/step
epoch 1800 - batch 2/3, discriminator_loss=0.000, generator_loss=2.078
1/1 [=====] - 0s 22ms/step
epoch 1800 - batch 3/3, discriminator_loss=0.000, generator_loss=4.482
1/1 [=====] - 0s 16ms/step
epoch 1801 - batch 1/3, discriminator_loss=0.000, generator_loss=4.403
1/1 [=====] - 0s 16ms/step
epoch 1801 - batch 2/3, discriminator_loss=0.001, generator_loss=3.994
1/1 [=====] - 0s 15ms/step
epoch 1801 - batch 3/3, discriminator_loss=0.000, generator_loss=6.167
4/4 [=====] - 0s 51ms/step
Accuracy réelle : 100%, fausse : 92%
1/1 [=====] - 0s 15ms/step
epoch 1802 - batch 1/3, discriminator_loss=0.000, generator_loss=5.579
1/1 [=====] - 0s 18ms/step

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epoch 1802 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.826  
1/1 [=====] - 0s 15ms/step  
epoch 1802 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.759  
1/1 [=====] - 0s 23ms/step  
epoch 1803 - batch 1/3, discriminator\_loss=0.002, generator\_loss=6.544  
1/1 [=====] - 0s 17ms/step  
epoch 1803 - batch 2/3, discriminator\_loss=0.000, generator\_loss=7.834  
1/1 [=====] - 0s 18ms/step  
epoch 1803 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.438  
1/1 [=====] - 0s 16ms/step  
epoch 1804 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.240  
1/1 [=====] - 0s 17ms/step  
epoch 1804 - batch 2/3, discriminator\_loss=0.000, generator\_loss=13.746  
1/1 [=====] - 0s 15ms/step  
epoch 1804 - batch 3/3, discriminator\_loss=0.374, generator\_loss=11.725  
1/1 [=====] - 0s 16ms/step  
epoch 1805 - batch 1/3, discriminator\_loss=0.002, generator\_loss=7.213  
1/1 [=====] - 0s 15ms/step  
epoch 1805 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.123  
1/1 [=====] - 0s 18ms/step  
epoch 1805 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.413  
1/1 [=====] - 0s 18ms/step  
epoch 1806 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.944  
1/1 [=====] - 0s 15ms/step  
epoch 1806 - batch 2/3, discriminator\_loss=0.007, generator\_loss=5.181  
1/1 [=====] - 0s 17ms/step  
epoch 1806 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.019  
1/1 [=====] - 0s 17ms/step  
epoch 1807 - batch 1/3, discriminator\_loss=0.000, generator\_loss=9.443  
1/1 [=====] - 0s 19ms/step  
epoch 1807 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.933  
1/1 [=====] - 0s 16ms/step  
epoch 1807 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.466  
1/1 [=====] - 0s 18ms/step  
epoch 1808 - batch 1/3, discriminator\_loss=0.002, generator\_loss=6.141  
1/1 [=====] - 0s 15ms/step  
epoch 1808 - batch 2/3, discriminator\_loss=0.001, generator\_loss=5.997  
1/1 [=====] - 0s 15ms/step  
epoch 1808 - batch 3/3, discriminator\_loss=0.005, generator\_loss=6.767  
1/1 [=====] - 0s 15ms/step  
epoch 1809 - batch 1/3, discriminator\_loss=0.001, generator\_loss=5.535  
1/1 [=====] - 0s 18ms/step  
epoch 1809 - batch 2/3, discriminator\_loss=0.001, generator\_loss=5.253  
1/1 [=====] - 0s 15ms/step  
epoch 1809 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.819  
1/1 [=====] - 0s 18ms/step  
epoch 1810 - batch 1/3, discriminator\_loss=0.006, generator\_loss=6.780  
1/1 [=====] - 0s 18ms/step

epoch 1810 - batch 2/3, discriminator\_loss=0.017, generator\_loss=4.922  
1/1 [=====] - 0s 16ms/step  
epoch 1810 - batch 3/3, discriminator\_loss=0.001, generator\_loss=4.106  
1/1 [=====] - 0s 15ms/step  
epoch 1811 - batch 1/3, discriminator\_loss=0.001, generator\_loss=4.088  
1/1 [=====] - 0s 15ms/step  
epoch 1811 - batch 2/3, discriminator\_loss=0.069, generator\_loss=5.961  
1/1 [=====] - 0s 15ms/step  
epoch 1811 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.128  
1/1 [=====] - 0s 16ms/step  
epoch 1812 - batch 1/3, discriminator\_loss=0.003, generator\_loss=8.375  
1/1 [=====] - 0s 17ms/step  
epoch 1812 - batch 2/3, discriminator\_loss=0.000, generator\_loss=10.098  
1/1 [=====] - 0s 16ms/step  
epoch 1812 - batch 3/3, discriminator\_loss=0.025, generator\_loss=10.648  
1/1 [=====] - 0s 16ms/step  
epoch 1813 - batch 1/3, discriminator\_loss=0.000, generator\_loss=10.515  
1/1 [=====] - 0s 19ms/step  
epoch 1813 - batch 2/3, discriminator\_loss=0.011, generator\_loss=8.984  
1/1 [=====] - 0s 17ms/step  
epoch 1813 - batch 3/3, discriminator\_loss=0.003, generator\_loss=8.072  
1/1 [=====] - 0s 15ms/step  
epoch 1814 - batch 1/3, discriminator\_loss=0.000, generator\_loss=8.643  
1/1 [=====] - 0s 16ms/step  
epoch 1814 - batch 2/3, discriminator\_loss=0.000, generator\_loss=7.116  
1/1 [=====] - 0s 15ms/step  
epoch 1814 - batch 3/3, discriminator\_loss=0.002, generator\_loss=6.115  
1/1 [=====] - 0s 19ms/step  
epoch 1815 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.207  
1/1 [=====] - 0s 18ms/step  
epoch 1815 - batch 2/3, discriminator\_loss=0.001, generator\_loss=4.918  
1/1 [=====] - 0s 16ms/step  
epoch 1815 - batch 3/3, discriminator\_loss=0.001, generator\_loss=5.489  
1/1 [=====] - 0s 16ms/step  
epoch 1816 - batch 1/3, discriminator\_loss=0.000, generator\_loss=4.035  
1/1 [=====] - 0s 15ms/step  
epoch 1816 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.878  
1/1 [=====] - 0s 23ms/step  
epoch 1816 - batch 3/3, discriminator\_loss=0.010, generator\_loss=4.381  
1/1 [=====] - 0s 15ms/step  
epoch 1817 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.076  
1/1 [=====] - 0s 15ms/step  
epoch 1817 - batch 2/3, discriminator\_loss=0.000, generator\_loss=4.231  
1/1 [=====] - 0s 15ms/step  
epoch 1817 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.970  
1/1 [=====] - 0s 15ms/step  
epoch 1818 - batch 1/3, discriminator\_loss=0.000, generator\_loss=4.912  
1/1 [=====] - 0s 17ms/step



epoch 1818 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.572  
 1/1 [=====] - 0s 20ms/step  
 epoch 1818 - batch 3/3, discriminator\_loss=0.001, generator\_loss=6.414  
 1/1 [=====] - 0s 15ms/step  
 epoch 1819 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.433  
 1/1 [=====] - 0s 15ms/step  
 epoch 1819 - batch 2/3, discriminator\_loss=0.001, generator\_loss=6.400  
 1/1 [=====] - 0s 15ms/step  
 epoch 1819 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.250  
 1/1 [=====] - 0s 20ms/step  
 epoch 1820 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.357  
 1/1 [=====] - 0s 16ms/step  
 epoch 1820 - batch 2/3, discriminator\_loss=0.000, generator\_loss=7.137  
 1/1 [=====] - 0s 15ms/step  
 epoch 1820 - batch 3/3, discriminator\_loss=0.002, generator\_loss=5.402  
 1/1 [=====] - 0s 16ms/step  
 epoch 1821 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.888  
 1/1 [=====] - 0s 15ms/step  
 epoch 1821 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.003  
 1/1 [=====] - 0s 15ms/step  
 epoch 1821 - batch 3/3, discriminator\_loss=0.008, generator\_loss=7.546  
 4/4 [=====] - 0s 51ms/step  
 Accuracy réelle : 100%, fausse : 100%  
 1/1 [=====] - 0s 15ms/step  
 epoch 1822 - batch 1/3, discriminator\_loss=0.001, generator\_loss=6.453  
 1/1 [=====] - 0s 16ms/step  
 epoch 1822 - batch 2/3, discriminator\_loss=0.001, generator\_loss=5.290  
 1/1 [=====] - 0s 16ms/step  
 epoch 1822 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.049  
 1/1 [=====] - 0s 15ms/step  
 epoch 1823 - batch 1/3, discriminator\_loss=0.001, generator\_loss=4.647  
 1/1 [=====] - 0s 15ms/step  
 epoch 1823 - batch 2/3, discriminator\_loss=0.000, generator\_loss=4.171  
 1/1 [=====] - 0s 18ms/step  
 epoch 1823 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.798  
 1/1 [=====] - 0s 15ms/step  
 epoch 1824 - batch 1/3, discriminator\_loss=0.001, generator\_loss=3.184  
 1/1 [=====] - 0s 15ms/step  
 epoch 1824 - batch 2/3, discriminator\_loss=0.003, generator\_loss=3.308  
 1/1 [=====] - 0s 18ms/step  
 epoch 1824 - batch 3/3, discriminator\_loss=0.002, generator\_loss=3.202  
 1/1 [=====] - 0s 15ms/step  
 epoch 1825 - batch 1/3, discriminator\_loss=0.001, generator\_loss=2.855  
 1/1 [=====] - 0s 15ms/step  
 epoch 1825 - batch 2/3, discriminator\_loss=0.002, generator\_loss=2.944  
 1/1 [=====] - 0s 16ms/step  
 epoch 1825 - batch 3/3, discriminator\_loss=0.002, generator\_loss=3.321  
 1/1 [=====] - 0s 16ms/step

epoch 1826 - batch 1/3, discriminator\_loss=0.000, generator\_loss=4.713  
1/1 [=====] - 0s 17ms/step  
epoch 1826 - batch 2/3, discriminator\_loss=0.001, generator\_loss=3.267  
1/1 [=====] - 0s 15ms/step  
epoch 1826 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.037  
1/1 [=====] - 0s 23ms/step  
epoch 1827 - batch 1/3, discriminator\_loss=0.000, generator\_loss=3.378  
1/1 [=====] - 0s 15ms/step  
epoch 1827 - batch 2/3, discriminator\_loss=0.001, generator\_loss=3.149  
1/1 [=====] - 0s 15ms/step  
epoch 1827 - batch 3/3, discriminator\_loss=0.008, generator\_loss=3.317  
1/1 [=====] - 0s 16ms/step  
epoch 1828 - batch 1/3, discriminator\_loss=0.001, generator\_loss=4.057  
1/1 [=====] - 0s 15ms/step  
epoch 1828 - batch 2/3, discriminator\_loss=0.002, generator\_loss=5.771  
1/1 [=====] - 0s 16ms/step  
epoch 1828 - batch 3/3, discriminator\_loss=0.003, generator\_loss=7.663  
1/1 [=====] - 0s 15ms/step  
epoch 1829 - batch 1/3, discriminator\_loss=0.001, generator\_loss=5.181  
1/1 [=====] - 0s 15ms/step  
epoch 1829 - batch 2/3, discriminator\_loss=0.001, generator\_loss=5.649  
1/1 [=====] - 0s 16ms/step  
epoch 1829 - batch 3/3, discriminator\_loss=0.012, generator\_loss=4.562  
1/1 [=====] - 0s 15ms/step  
epoch 1830 - batch 1/3, discriminator\_loss=0.002, generator\_loss=3.952  
1/1 [=====] - 0s 16ms/step  
epoch 1830 - batch 2/3, discriminator\_loss=0.002, generator\_loss=3.832  
1/1 [=====] - 0s 15ms/step  
epoch 1830 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.290  
1/1 [=====] - 0s 15ms/step  
epoch 1831 - batch 1/3, discriminator\_loss=0.032, generator\_loss=2.820  
1/1 [=====] - 0s 19ms/step  
epoch 1831 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.924  
1/1 [=====] - 0s 16ms/step  
epoch 1831 - batch 3/3, discriminator\_loss=0.001, generator\_loss=5.797  
1/1 [=====] - 0s 16ms/step  
epoch 1832 - batch 1/3, discriminator\_loss=0.005, generator\_loss=6.940  
1/1 [=====] - 0s 16ms/step  
epoch 1832 - batch 2/3, discriminator\_loss=0.004, generator\_loss=5.944  
1/1 [=====] - 0s 16ms/step  
epoch 1832 - batch 3/3, discriminator\_loss=0.023, generator\_loss=4.152  
1/1 [=====] - 0s 16ms/step  
epoch 1833 - batch 1/3, discriminator\_loss=0.001, generator\_loss=4.257  
1/1 [=====] - 0s 22ms/step  
epoch 1833 - batch 2/3, discriminator\_loss=0.003, generator\_loss=2.507  
1/1 [=====] - 0s 16ms/step  
epoch 1833 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.339  
1/1 [=====] - 0s 16ms/step

epoch 1834 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.659  
1/1 [=====] - 0s 16ms/step  
epoch 1834 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.068  
1/1 [=====] - 0s 15ms/step  
epoch 1834 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.986  
1/1 [=====] - 0s 19ms/step  
epoch 1835 - batch 1/3, discriminator\_loss=0.007, generator\_loss=0.314  
1/1 [=====] - 0s 16ms/step  
epoch 1835 - batch 2/3, discriminator\_loss=0.003, generator\_loss=0.458  
1/1 [=====] - 0s 18ms/step  
epoch 1835 - batch 3/3, discriminator\_loss=0.003, generator\_loss=0.437  
1/1 [=====] - 0s 15ms/step  
epoch 1836 - batch 1/3, discriminator\_loss=0.007, generator\_loss=0.771  
1/1 [=====] - 0s 19ms/step  
epoch 1836 - batch 2/3, discriminator\_loss=0.059, generator\_loss=1.661  
1/1 [=====] - 0s 15ms/step  
epoch 1836 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.096  
1/1 [=====] - 0s 15ms/step  
epoch 1837 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.512  
1/1 [=====] - 0s 16ms/step  
epoch 1837 - batch 2/3, discriminator\_loss=0.015, generator\_loss=6.767  
1/1 [=====] - 0s 15ms/step  
epoch 1837 - batch 3/3, discriminator\_loss=0.001, generator\_loss=5.377  
1/1 [=====] - 0s 18ms/step  
epoch 1838 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.708  
1/1 [=====] - 0s 17ms/step  
epoch 1838 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.964  
1/1 [=====] - 0s 15ms/step  
epoch 1838 - batch 3/3, discriminator\_loss=0.000, generator\_loss=7.487  
1/1 [=====] - 0s 15ms/step  
epoch 1839 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.656  
1/1 [=====] - 0s 15ms/step  
epoch 1839 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.269  
1/1 [=====] - 0s 15ms/step  
epoch 1839 - batch 3/3, discriminator\_loss=0.049, generator\_loss=7.261  
1/1 [=====] - 0s 15ms/step  
epoch 1840 - batch 1/3, discriminator\_loss=0.000, generator\_loss=4.615  
1/1 [=====] - 0s 16ms/step  
epoch 1840 - batch 2/3, discriminator\_loss=0.000, generator\_loss=4.424  
1/1 [=====] - 0s 16ms/step  
epoch 1840 - batch 3/3, discriminator\_loss=0.001, generator\_loss=2.151  
1/1 [=====] - 0s 16ms/step  
epoch 1841 - batch 1/3, discriminator\_loss=0.003, generator\_loss=1.559  
1/1 [=====] - 0s 18ms/step  
epoch 1841 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.659  
1/1 [=====] - 0s 16ms/step  
epoch 1841 - batch 3/3, discriminator\_loss=0.045, generator\_loss=0.319  
4/4 [=====] - 0s 50ms/step

Accuracy réelle : 100%, fausse : 27%

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1/1 [=====] - 0s 19ms/step
epoch 1842 - batch 1/3, discriminator_loss=0.003, generator_loss=0.187
1/1 [=====] - 0s 17ms/step
epoch 1842 - batch 2/3, discriminator_loss=0.025, generator_loss=0.040
1/1 [=====] - 0s 15ms/step
epoch 1842 - batch 3/3, discriminator_loss=0.003, generator_loss=0.049
1/1 [=====] - 0s 16ms/step
epoch 1843 - batch 1/3, discriminator_loss=0.008, generator_loss=0.056
1/1 [=====] - 0s 15ms/step
epoch 1843 - batch 2/3, discriminator_loss=0.005, generator_loss=0.095
1/1 [=====] - 0s 16ms/step
epoch 1843 - batch 3/3, discriminator_loss=0.012, generator_loss=0.267
1/1 [=====] - 0s 17ms/step
epoch 1844 - batch 1/3, discriminator_loss=0.018, generator_loss=1.072
1/1 [=====] - 0s 15ms/step
epoch 1844 - batch 2/3, discriminator_loss=0.000, generator_loss=1.187
1/1 [=====] - 0s 16ms/step
epoch 1844 - batch 3/3, discriminator_loss=0.000, generator_loss=3.540
1/1 [=====] - 0s 15ms/step
epoch 1845 - batch 1/3, discriminator_loss=0.000, generator_loss=9.370
1/1 [=====] - 0s 17ms/step
epoch 1845 - batch 2/3, discriminator_loss=0.000, generator_loss=10.119
1/1 [=====] - 0s 22ms/step
epoch 1845 - batch 3/3, discriminator_loss=0.057, generator_loss=6.518
1/1 [=====] - 0s 17ms/step
epoch 1846 - batch 1/3, discriminator_loss=0.000, generator_loss=8.471
1/1 [=====] - 0s 15ms/step
epoch 1846 - batch 2/3, discriminator_loss=0.003, generator_loss=4.430
1/1 [=====] - 0s 15ms/step
epoch 1846 - batch 3/3, discriminator_loss=0.016, generator_loss=2.786
1/1 [=====] - 0s 18ms/step
epoch 1847 - batch 1/3, discriminator_loss=0.000, generator_loss=2.307
1/1 [=====] - 0s 16ms/step
epoch 1847 - batch 2/3, discriminator_loss=0.000, generator_loss=3.035
1/1 [=====] - 0s 17ms/step
epoch 1847 - batch 3/3, discriminator_loss=0.000, generator_loss=0.915
1/1 [=====] - 0s 15ms/step
epoch 1848 - batch 1/3, discriminator_loss=0.001, generator_loss=0.546
1/1 [=====] - 0s 16ms/step
epoch 1848 - batch 2/3, discriminator_loss=0.007, generator_loss=0.262
1/1 [=====] - 0s 16ms/step
epoch 1848 - batch 3/3, discriminator_loss=0.001, generator_loss=0.512
1/1 [=====] - 0s 15ms/step
epoch 1849 - batch 1/3, discriminator_loss=0.002, generator_loss=0.090
1/1 [=====] - 0s 16ms/step
epoch 1849 - batch 2/3, discriminator_loss=0.001, generator_loss=0.104
1/1 [=====] - 0s 16ms/step

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epoch 1849 - batch 3/3, discriminator\_loss=0.004, generator\_loss=0.256  
 1/1 [=====] - 0s 15ms/step  
 epoch 1850 - batch 1/3, discriminator\_loss=0.001, generator\_loss=0.253  
 1/1 [=====] - 0s 15ms/step  
 epoch 1850 - batch 2/3, discriminator\_loss=0.001, generator\_loss=0.365  
 1/1 [=====] - 0s 15ms/step  
 epoch 1850 - batch 3/3, discriminator\_loss=0.030, generator\_loss=1.090  
 1/1 [=====] - 0s 15ms/step  
 epoch 1851 - batch 1/3, discriminator\_loss=0.002, generator\_loss=1.993  
 1/1 [=====] - 0s 15ms/step  
 epoch 1851 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.020  
 1/1 [=====] - 0s 15ms/step  
 epoch 1851 - batch 3/3, discriminator\_loss=0.000, generator\_loss=10.967  
 1/1 [=====] - 0s 15ms/step  
 epoch 1852 - batch 1/3, discriminator\_loss=0.000, generator\_loss=8.692  
 1/1 [=====] - 0s 19ms/step  
 epoch 1852 - batch 2/3, discriminator\_loss=0.000, generator\_loss=10.567  
 1/1 [=====] - 0s 16ms/step  
 epoch 1852 - batch 3/3, discriminator\_loss=0.001, generator\_loss=11.965  
 1/1 [=====] - 0s 16ms/step  
 epoch 1853 - batch 1/3, discriminator\_loss=0.000, generator\_loss=11.795  
 1/1 [=====] - 0s 18ms/step  
 epoch 1853 - batch 2/3, discriminator\_loss=0.000, generator\_loss=12.278  
 1/1 [=====] - 0s 16ms/step  
 epoch 1853 - batch 3/3, discriminator\_loss=0.179, generator\_loss=10.171  
 1/1 [=====] - 0s 17ms/step  
 epoch 1854 - batch 1/3, discriminator\_loss=0.000, generator\_loss=8.820  
 1/1 [=====] - 0s 16ms/step  
 epoch 1854 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.113  
 1/1 [=====] - 0s 17ms/step  
 epoch 1854 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.641  
 1/1 [=====] - 0s 16ms/step  
 epoch 1855 - batch 1/3, discriminator\_loss=0.002, generator\_loss=2.083  
 1/1 [=====] - 0s 16ms/step  
 epoch 1855 - batch 2/3, discriminator\_loss=0.002, generator\_loss=2.524  
 1/1 [=====] - 0s 15ms/step  
 epoch 1855 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.915  
 1/1 [=====] - 0s 18ms/step  
 epoch 1856 - batch 1/3, discriminator\_loss=0.001, generator\_loss=0.982  
 1/1 [=====] - 0s 16ms/step  
 epoch 1856 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.251  
 1/1 [=====] - 0s 15ms/step  
 epoch 1856 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.437  
 1/1 [=====] - 0s 15ms/step  
 epoch 1857 - batch 1/3, discriminator\_loss=0.003, generator\_loss=0.270  
 1/1 [=====] - 0s 16ms/step  
 epoch 1857 - batch 2/3, discriminator\_loss=0.018, generator\_loss=0.239  
 1/1 [=====] - 0s 16ms/step

epoch 1857 - batch 3/3, discriminator\_loss=0.027, generator\_loss=0.368  
 1/1 [=====] - 0s 19ms/step  
 epoch 1858 - batch 1/3, discriminator\_loss=0.002, generator\_loss=0.883  
 1/1 [=====] - 0s 17ms/step  
 epoch 1858 - batch 2/3, discriminator\_loss=0.006, generator\_loss=3.296  
 1/1 [=====] - 0s 16ms/step  
 epoch 1858 - batch 3/3, discriminator\_loss=0.000, generator\_loss=9.868  
 1/1 [=====] - 0s 15ms/step  
 epoch 1859 - batch 1/3, discriminator\_loss=0.001, generator\_loss=10.102  
 1/1 [=====] - 0s 16ms/step  
 epoch 1859 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.909  
 1/1 [=====] - 0s 17ms/step  
 epoch 1859 - batch 3/3, discriminator\_loss=0.000, generator\_loss=11.067  
 1/1 [=====] - 0s 15ms/step  
 epoch 1860 - batch 1/3, discriminator\_loss=0.005, generator\_loss=12.931  
 1/1 [=====] - 0s 19ms/step  
 epoch 1860 - batch 2/3, discriminator\_loss=0.000, generator\_loss=11.336  
 1/1 [=====] - 0s 15ms/step  
 epoch 1860 - batch 3/3, discriminator\_loss=0.000, generator\_loss=14.092  
 1/1 [=====] - 0s 15ms/step  
 epoch 1861 - batch 1/3, discriminator\_loss=0.042, generator\_loss=10.062  
 1/1 [=====] - 0s 15ms/step  
 epoch 1861 - batch 2/3, discriminator\_loss=0.000, generator\_loss=10.718  
 1/1 [=====] - 0s 16ms/step  
 epoch 1861 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.999  
 4/4 [=====] - 0s 51ms/step  
 Accuracy réelle : 100%, fausse : 100%  
 1/1 [=====] - 0s 16ms/step  
 epoch 1862 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.698  
 1/1 [=====] - 0s 15ms/step  
 epoch 1862 - batch 2/3, discriminator\_loss=0.001, generator\_loss=6.339  
 1/1 [=====] - 0s 17ms/step  
 epoch 1862 - batch 3/3, discriminator\_loss=0.000, generator\_loss=7.345  
 1/1 [=====] - 0s 19ms/step  
 epoch 1863 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.053  
 1/1 [=====] - 0s 18ms/step  
 epoch 1863 - batch 2/3, discriminator\_loss=0.006, generator\_loss=2.708  
 1/1 [=====] - 0s 16ms/step  
 epoch 1863 - batch 3/3, discriminator\_loss=0.005, generator\_loss=2.545  
 1/1 [=====] - 0s 17ms/step  
 epoch 1864 - batch 1/3, discriminator\_loss=0.077, generator\_loss=2.456  
 1/1 [=====] - 0s 19ms/step  
 epoch 1864 - batch 2/3, discriminator\_loss=0.003, generator\_loss=2.906  
 1/1 [=====] - 0s 15ms/step  
 epoch 1864 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.543  
 1/1 [=====] - 0s 16ms/step  
 epoch 1865 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.908  
 1/1 [=====] - 0s 19ms/step

epoch 1865 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.325  
1/1 [=====] - 0s 15ms/step  
epoch 1865 - batch 3/3, discriminator\_loss=0.001, generator\_loss=10.471  
1/1 [=====] - 0s 15ms/step  
epoch 1866 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.201  
1/1 [=====] - 0s 17ms/step  
epoch 1866 - batch 2/3, discriminator\_loss=0.010, generator\_loss=7.048  
1/1 [=====] - 0s 15ms/step  
epoch 1866 - batch 3/3, discriminator\_loss=0.010, generator\_loss=7.529  
1/1 [=====] - 0s 17ms/step  
epoch 1867 - batch 1/3, discriminator\_loss=0.001, generator\_loss=5.087  
1/1 [=====] - 0s 15ms/step  
epoch 1867 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.398  
1/1 [=====] - 0s 15ms/step  
epoch 1867 - batch 3/3, discriminator\_loss=0.015, generator\_loss=3.402  
1/1 [=====] - 0s 15ms/step  
epoch 1868 - batch 1/3, discriminator\_loss=0.003, generator\_loss=3.972  
1/1 [=====] - 0s 15ms/step  
epoch 1868 - batch 2/3, discriminator\_loss=0.000, generator\_loss=4.046  
1/1 [=====] - 0s 15ms/step  
epoch 1868 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.247  
1/1 [=====] - 0s 15ms/step  
epoch 1869 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.018  
1/1 [=====] - 0s 15ms/step  
epoch 1869 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.111  
1/1 [=====] - 0s 15ms/step  
epoch 1869 - batch 3/3, discriminator\_loss=0.003, generator\_loss=6.807  
1/1 [=====] - 0s 18ms/step  
epoch 1870 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.355  
1/1 [=====] - 0s 16ms/step  
epoch 1870 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.437  
1/1 [=====] - 0s 17ms/step  
epoch 1870 - batch 3/3, discriminator\_loss=0.001, generator\_loss=3.546  
1/1 [=====] - 0s 15ms/step  
epoch 1871 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.406  
1/1 [=====] - 0s 16ms/step  
epoch 1871 - batch 2/3, discriminator\_loss=0.029, generator\_loss=2.984  
1/1 [=====] - 0s 18ms/step  
epoch 1871 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.620  
1/1 [=====] - 0s 15ms/step  
epoch 1872 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.017  
1/1 [=====] - 0s 16ms/step  
epoch 1872 - batch 2/3, discriminator\_loss=0.001, generator\_loss=0.871  
1/1 [=====] - 0s 15ms/step  
epoch 1872 - batch 3/3, discriminator\_loss=0.004, generator\_loss=0.801  
1/1 [=====] - 0s 19ms/step  
epoch 1873 - batch 1/3, discriminator\_loss=0.010, generator\_loss=0.573  
1/1 [=====] - 0s 17ms/step

epoch 1873 - batch 2/3, discriminator\_loss=0.030, generator\_loss=2.246  
1/1 [=====] - 0s 15ms/step  
epoch 1873 - batch 3/3, discriminator\_loss=0.003, generator\_loss=3.165  
1/1 [=====] - 0s 15ms/step  
epoch 1874 - batch 1/3, discriminator\_loss=0.056, generator\_loss=8.612  
1/1 [=====] - 0s 18ms/step  
epoch 1874 - batch 2/3, discriminator\_loss=0.009, generator\_loss=13.770  
1/1 [=====] - 0s 15ms/step  
epoch 1874 - batch 3/3, discriminator\_loss=0.000, generator\_loss=17.024  
1/1 [=====] - 0s 15ms/step  
epoch 1875 - batch 1/3, discriminator\_loss=0.001, generator\_loss=19.348  
1/1 [=====] - 0s 15ms/step  
epoch 1875 - batch 2/3, discriminator\_loss=0.000, generator\_loss=17.657  
1/1 [=====] - 0s 18ms/step  
epoch 1875 - batch 3/3, discriminator\_loss=0.000, generator\_loss=22.533  
1/1 [=====] - 0s 16ms/step  
epoch 1876 - batch 1/3, discriminator\_loss=0.000, generator\_loss=21.163  
1/1 [=====] - 0s 17ms/step  
epoch 1876 - batch 2/3, discriminator\_loss=0.000, generator\_loss=24.409  
1/1 [=====] - 0s 17ms/step  
epoch 1876 - batch 3/3, discriminator\_loss=0.000, generator\_loss=23.371  
1/1 [=====] - 0s 15ms/step  
epoch 1877 - batch 1/3, discriminator\_loss=0.000, generator\_loss=26.005  
1/1 [=====] - 0s 17ms/step  
epoch 1877 - batch 2/3, discriminator\_loss=0.146, generator\_loss=21.752  
1/1 [=====] - 0s 15ms/step  
epoch 1877 - batch 3/3, discriminator\_loss=0.225, generator\_loss=16.552  
1/1 [=====] - 0s 15ms/step  
epoch 1878 - batch 1/3, discriminator\_loss=0.001, generator\_loss=11.360  
1/1 [=====] - 0s 15ms/step  
epoch 1878 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.198  
1/1 [=====] - 0s 15ms/step  
epoch 1878 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.694  
1/1 [=====] - 0s 18ms/step  
epoch 1879 - batch 1/3, discriminator\_loss=0.001, generator\_loss=0.674  
1/1 [=====] - 0s 15ms/step  
epoch 1879 - batch 2/3, discriminator\_loss=0.247, generator\_loss=2.426  
1/1 [=====] - 0s 18ms/step  
epoch 1879 - batch 3/3, discriminator\_loss=0.000, generator\_loss=7.806  
1/1 [=====] - 0s 15ms/step  
epoch 1880 - batch 1/3, discriminator\_loss=0.000, generator\_loss=14.069  
1/1 [=====] - 0s 15ms/step  
epoch 1880 - batch 2/3, discriminator\_loss=0.001, generator\_loss=14.985  
1/1 [=====] - 0s 15ms/step  
epoch 1880 - batch 3/3, discriminator\_loss=0.040, generator\_loss=17.087  
1/1 [=====] - 0s 20ms/step  
epoch 1881 - batch 1/3, discriminator\_loss=0.000, generator\_loss=20.772  
1/1 [=====] - 0s 15ms/step



epoch 1881 - batch 2/3, discriminator\_loss=0.034, generator\_loss=18.319  
1/1 [=====] - 0s 17ms/step  
epoch 1881 - batch 3/3, discriminator\_loss=0.001, generator\_loss=16.899  
4/4 [=====] - 0s 51ms/step  
Accuracy réelle : 97%, fausse : 100%  
1/1 [=====] - 0s 16ms/step  
epoch 1882 - batch 1/3, discriminator\_loss=0.004, generator\_loss=16.396  
1/1 [=====] - 0s 16ms/step  
epoch 1882 - batch 2/3, discriminator\_loss=0.000, generator\_loss=18.912  
1/1 [=====] - 0s 17ms/step  
epoch 1882 - batch 3/3, discriminator\_loss=0.000, generator\_loss=14.156  
1/1 [=====] - 0s 15ms/step  
epoch 1883 - batch 1/3, discriminator\_loss=0.000, generator\_loss=14.696  
1/1 [=====] - 0s 15ms/step  
epoch 1883 - batch 2/3, discriminator\_loss=0.000, generator\_loss=15.050  
1/1 [=====] - 0s 15ms/step  
epoch 1883 - batch 3/3, discriminator\_loss=0.000, generator\_loss=12.296  
1/1 [=====] - 0s 15ms/step  
epoch 1884 - batch 1/3, discriminator\_loss=0.000, generator\_loss=15.500  
1/1 [=====] - 0s 15ms/step  
epoch 1884 - batch 2/3, discriminator\_loss=0.000, generator\_loss=11.170  
1/1 [=====] - 0s 15ms/step  
epoch 1884 - batch 3/3, discriminator\_loss=0.000, generator\_loss=13.572  
1/1 [=====] - 0s 15ms/step  
epoch 1885 - batch 1/3, discriminator\_loss=0.097, generator\_loss=12.900  
1/1 [=====] - 0s 16ms/step  
epoch 1885 - batch 2/3, discriminator\_loss=0.007, generator\_loss=16.753  
1/1 [=====] - 0s 17ms/step  
epoch 1885 - batch 3/3, discriminator\_loss=0.000, generator\_loss=20.014  
1/1 [=====] - 0s 19ms/step  
epoch 1886 - batch 1/3, discriminator\_loss=0.000, generator\_loss=21.561  
1/1 [=====] - 0s 15ms/step  
epoch 1886 - batch 2/3, discriminator\_loss=0.000, generator\_loss=23.047  
1/1 [=====] - 0s 16ms/step  
epoch 1886 - batch 3/3, discriminator\_loss=0.132, generator\_loss=20.058  
1/1 [=====] - 0s 15ms/step  
epoch 1887 - batch 1/3, discriminator\_loss=0.068, generator\_loss=18.418  
1/1 [=====] - 0s 16ms/step  
epoch 1887 - batch 2/3, discriminator\_loss=0.000, generator\_loss=13.753  
1/1 [=====] - 0s 20ms/step  
epoch 1887 - batch 3/3, discriminator\_loss=0.000, generator\_loss=12.478  
1/1 [=====] - 0s 16ms/step  
epoch 1888 - batch 1/3, discriminator\_loss=0.036, generator\_loss=5.544  
1/1 [=====] - 0s 26ms/step  
epoch 1888 - batch 2/3, discriminator\_loss=0.004, generator\_loss=3.331  
1/1 [=====] - 0s 17ms/step  
epoch 1888 - batch 3/3, discriminator\_loss=0.018, generator\_loss=1.417  
1/1 [=====] - 0s 17ms/step

epoch 1889 - batch 1/3, discriminator\_loss=0.029, generator\_loss=1.712  
 1/1 [=====] - 0s 16ms/step  
 epoch 1889 - batch 2/3, discriminator\_loss=0.227, generator\_loss=13.390  
 1/1 [=====] - 0s 25ms/step  
 epoch 1889 - batch 3/3, discriminator\_loss=0.007, generator\_loss=24.600  
 1/1 [=====] - 0s 16ms/step  
 epoch 1890 - batch 1/3, discriminator\_loss=0.093, generator\_loss=30.694  
 1/1 [=====] - 0s 19ms/step  
 epoch 1890 - batch 2/3, discriminator\_loss=0.099, generator\_loss=30.459  
 1/1 [=====] - 0s 15ms/step  
 epoch 1890 - batch 3/3, discriminator\_loss=0.000, generator\_loss=30.575  
 1/1 [=====] - 0s 15ms/step  
 epoch 1891 - batch 1/3, discriminator\_loss=0.000, generator\_loss=30.113  
 1/1 [=====] - 0s 15ms/step  
 epoch 1891 - batch 2/3, discriminator\_loss=0.343, generator\_loss=28.324  
 1/1 [=====] - 0s 17ms/step  
 epoch 1891 - batch 3/3, discriminator\_loss=0.183, generator\_loss=24.044  
 1/1 [=====] - 0s 16ms/step  
 epoch 1892 - batch 1/3, discriminator\_loss=0.000, generator\_loss=20.993  
 1/1 [=====] - 0s 16ms/step  
 epoch 1892 - batch 2/3, discriminator\_loss=0.000, generator\_loss=17.501  
 1/1 [=====] - 0s 27ms/step  
 epoch 1892 - batch 3/3, discriminator\_loss=0.030, generator\_loss=14.035  
 1/1 [=====] - 0s 18ms/step  
 epoch 1893 - batch 1/3, discriminator\_loss=0.007, generator\_loss=10.380  
 1/1 [=====] - 0s 18ms/step  
 epoch 1893 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.322  
 1/1 [=====] - 0s 18ms/step  
 epoch 1893 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.774  
 1/1 [=====] - 0s 17ms/step  
 epoch 1894 - batch 1/3, discriminator\_loss=0.002, generator\_loss=2.232  
 1/1 [=====] - 0s 15ms/step  
 epoch 1894 - batch 2/3, discriminator\_loss=0.009, generator\_loss=1.155  
 1/1 [=====] - 0s 18ms/step  
 epoch 1894 - batch 3/3, discriminator\_loss=0.001, generator\_loss=1.085  
 1/1 [=====] - 0s 19ms/step  
 epoch 1895 - batch 1/3, discriminator\_loss=0.002, generator\_loss=0.792  
 1/1 [=====] - 0s 15ms/step  
 epoch 1895 - batch 2/3, discriminator\_loss=0.009, generator\_loss=0.437  
 1/1 [=====] - 0s 17ms/step  
 epoch 1895 - batch 3/3, discriminator\_loss=0.035, generator\_loss=0.819  
 1/1 [=====] - 0s 18ms/step  
 epoch 1896 - batch 1/3, discriminator\_loss=0.001, generator\_loss=0.907  
 1/1 [=====] - 0s 15ms/step  
 epoch 1896 - batch 2/3, discriminator\_loss=0.003, generator\_loss=1.897  
 1/1 [=====] - 0s 16ms/step  
 epoch 1896 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.552  
 1/1 [=====] - 0s 15ms/step

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epoch 1897 - batch 1/3, discriminator_loss=0.005, generator_loss=2.654
1/1 [=====] - 0s 15ms/step
epoch 1897 - batch 2/3, discriminator_loss=0.000, generator_loss=3.782
1/1 [=====] - 0s 15ms/step
epoch 1897 - batch 3/3, discriminator_loss=0.000, generator_loss=4.719
1/1 [=====] - 0s 15ms/step
epoch 1898 - batch 1/3, discriminator_loss=0.000, generator_loss=7.084
1/1 [=====] - 0s 18ms/step
epoch 1898 - batch 2/3, discriminator_loss=0.000, generator_loss=9.656
1/1 [=====] - 0s 15ms/step
epoch 1898 - batch 3/3, discriminator_loss=0.035, generator_loss=6.532
1/1 [=====] - 0s 15ms/step
epoch 1899 - batch 1/3, discriminator_loss=0.010, generator_loss=6.525
1/1 [=====] - 0s 15ms/step
epoch 1899 - batch 2/3, discriminator_loss=0.000, generator_loss=4.366
1/1 [=====] - 0s 15ms/step
epoch 1899 - batch 3/3, discriminator_loss=0.000, generator_loss=2.602
1/1 [=====] - 0s 16ms/step
epoch 1900 - batch 1/3, discriminator_loss=0.001, generator_loss=2.304
1/1 [=====] - 0s 16ms/step
epoch 1900 - batch 2/3, discriminator_loss=0.000, generator_loss=3.696
1/1 [=====] - 0s 15ms/step
epoch 1900 - batch 3/3, discriminator_loss=0.001, generator_loss=2.490
1/1 [=====] - 0s 16ms/step
epoch 1901 - batch 1/3, discriminator_loss=0.016, generator_loss=1.701
1/1 [=====] - 0s 15ms/step
epoch 1901 - batch 2/3, discriminator_loss=0.005, generator_loss=2.850
1/1 [=====] - 0s 15ms/step
epoch 1901 - batch 3/3, discriminator_loss=0.000, generator_loss=2.936
4/4 [=====] - 0s 51ms/step
Accuracy réelle : 100%, fausse : 76%
1/1 [=====] - 0s 15ms/step
epoch 1902 - batch 1/3, discriminator_loss=0.000, generator_loss=2.961
1/1 [=====] - 0s 16ms/step
epoch 1902 - batch 2/3, discriminator_loss=0.000, generator_loss=4.123
1/1 [=====] - 0s 16ms/step
epoch 1902 - batch 3/3, discriminator_loss=0.000, generator_loss=4.780
1/1 [=====] - 0s 17ms/step
epoch 1903 - batch 1/3, discriminator_loss=0.000, generator_loss=4.796
1/1 [=====] - 0s 16ms/step
epoch 1903 - batch 2/3, discriminator_loss=0.000, generator_loss=6.277
1/1 [=====] - 0s 16ms/step
epoch 1903 - batch 3/3, discriminator_loss=0.000, generator_loss=4.767
1/1 [=====] - 0s 15ms/step
epoch 1904 - batch 1/3, discriminator_loss=0.000, generator_loss=5.097
1/1 [=====] - 0s 16ms/step
epoch 1904 - batch 2/3, discriminator_loss=0.000, generator_loss=3.335
1/1 [=====] - 0s 15ms/step

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epoch 1904 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.871  
 1/1 [=====] - 0s 15ms/step  
 epoch 1905 - batch 1/3, discriminator\_loss=0.000, generator\_loss=4.026  
 1/1 [=====] - 0s 16ms/step  
 epoch 1905 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.108  
 1/1 [=====] - 0s 22ms/step  
 epoch 1905 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.795  
 1/1 [=====] - 0s 18ms/step  
 epoch 1906 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.670  
 1/1 [=====] - 0s 16ms/step  
 epoch 1906 - batch 2/3, discriminator\_loss=0.000, generator\_loss=4.330  
 1/1 [=====] - 0s 16ms/step  
 epoch 1906 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.970  
 1/1 [=====] - 0s 16ms/step  
 epoch 1907 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.645  
 1/1 [=====] - 0s 16ms/step  
 epoch 1907 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.252  
 1/1 [=====] - 0s 16ms/step  
 epoch 1907 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.145  
 1/1 [=====] - 0s 16ms/step  
 epoch 1908 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.680  
 1/1 [=====] - 0s 15ms/step  
 epoch 1908 - batch 2/3, discriminator\_loss=0.001, generator\_loss=10.147  
 1/1 [=====] - 0s 16ms/step  
 epoch 1908 - batch 3/3, discriminator\_loss=0.001, generator\_loss=7.423  
 1/1 [=====] - 0s 15ms/step  
 epoch 1909 - batch 1/3, discriminator\_loss=0.001, generator\_loss=6.708  
 1/1 [=====] - 0s 15ms/step  
 epoch 1909 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.963  
 1/1 [=====] - 0s 16ms/step  
 epoch 1909 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.092  
 1/1 [=====] - 0s 16ms/step  
 epoch 1910 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.988  
 1/1 [=====] - 0s 15ms/step  
 epoch 1910 - batch 2/3, discriminator\_loss=0.001, generator\_loss=7.374  
 1/1 [=====] - 0s 23ms/step  
 epoch 1910 - batch 3/3, discriminator\_loss=0.002, generator\_loss=6.031  
 1/1 [=====] - 0s 17ms/step  
 epoch 1911 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.412  
 1/1 [=====] - 0s 17ms/step  
 epoch 1911 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.401  
 1/1 [=====] - 0s 18ms/step  
 epoch 1911 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.353  
 1/1 [=====] - 0s 15ms/step  
 epoch 1912 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.892  
 1/1 [=====] - 0s 15ms/step  
 epoch 1912 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.706  
 1/1 [=====] - 0s 22ms/step

epoch 1912 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.397  
 1/1 [=====] - 0s 15ms/step  
 epoch 1913 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.859  
 1/1 [=====] - 0s 18ms/step  
 epoch 1913 - batch 2/3, discriminator\_loss=0.006, generator\_loss=6.000  
 1/1 [=====] - 0s 17ms/step  
 epoch 1913 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.614  
 1/1 [=====] - 0s 15ms/step  
 epoch 1914 - batch 1/3, discriminator\_loss=0.001, generator\_loss=7.424  
 1/1 [=====] - 0s 17ms/step  
 epoch 1914 - batch 2/3, discriminator\_loss=0.002, generator\_loss=5.714  
 1/1 [=====] - 0s 18ms/step  
 epoch 1914 - batch 3/3, discriminator\_loss=0.004, generator\_loss=5.273  
 1/1 [=====] - 0s 16ms/step  
 epoch 1915 - batch 1/3, discriminator\_loss=0.001, generator\_loss=6.029  
 1/1 [=====] - 0s 18ms/step  
 epoch 1915 - batch 2/3, discriminator\_loss=0.000, generator\_loss=7.722  
 1/1 [=====] - 0s 15ms/step  
 epoch 1915 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.836  
 1/1 [=====] - 0s 16ms/step  
 epoch 1916 - batch 1/3, discriminator\_loss=0.000, generator\_loss=9.162  
 1/1 [=====] - 0s 15ms/step  
 epoch 1916 - batch 2/3, discriminator\_loss=0.001, generator\_loss=7.044  
 1/1 [=====] - 0s 17ms/step  
 epoch 1916 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.302  
 1/1 [=====] - 0s 16ms/step  
 epoch 1917 - batch 1/3, discriminator\_loss=0.006, generator\_loss=5.431  
 1/1 [=====] - 0s 16ms/step  
 epoch 1917 - batch 2/3, discriminator\_loss=0.001, generator\_loss=5.711  
 1/1 [=====] - 0s 19ms/step  
 epoch 1917 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.845  
 1/1 [=====] - 0s 29ms/step  
 epoch 1918 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.173  
 1/1 [=====] - 0s 16ms/step  
 epoch 1918 - batch 2/3, discriminator\_loss=0.006, generator\_loss=7.627  
 1/1 [=====] - 0s 15ms/step  
 epoch 1918 - batch 3/3, discriminator\_loss=0.001, generator\_loss=8.678  
 1/1 [=====] - 0s 15ms/step  
 epoch 1919 - batch 1/3, discriminator\_loss=0.000, generator\_loss=11.511  
 1/1 [=====] - 0s 15ms/step  
 epoch 1919 - batch 2/3, discriminator\_loss=0.000, generator\_loss=10.591  
 1/1 [=====] - 0s 16ms/step  
 epoch 1919 - batch 3/3, discriminator\_loss=0.003, generator\_loss=9.942  
 1/1 [=====] - 0s 17ms/step  
 epoch 1920 - batch 1/3, discriminator\_loss=0.001, generator\_loss=9.733  
 1/1 [=====] - 0s 15ms/step  
 epoch 1920 - batch 2/3, discriminator\_loss=0.000, generator\_loss=10.573  
 1/1 [=====] - 0s 15ms/step

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epoch 1920 - batch 3/3, discriminator_loss=0.000, generator_loss=10.054
1/1 [=====] - 0s 25ms/step
epoch 1921 - batch 1/3, discriminator_loss=0.020, generator_loss=10.933
1/1 [=====] - 0s 19ms/step
epoch 1921 - batch 2/3, discriminator_loss=0.000, generator_loss=9.325
1/1 [=====] - 0s 15ms/step
epoch 1921 - batch 3/3, discriminator_loss=0.004, generator_loss=7.367
4/4 [=====] - 0s 51ms/step
Accuracy réelle : 100%, fausse : 98%
1/1 [=====] - 0s 16ms/step
epoch 1922 - batch 1/3, discriminator_loss=0.000, generator_loss=8.475
1/1 [=====] - 0s 15ms/step
epoch 1922 - batch 2/3, discriminator_loss=0.001, generator_loss=11.363
1/1 [=====] - 0s 15ms/step
epoch 1922 - batch 3/3, discriminator_loss=0.002, generator_loss=8.169
1/1 [=====] - 0s 16ms/step
epoch 1923 - batch 1/3, discriminator_loss=0.000, generator_loss=7.019
1/1 [=====] - 0s 15ms/step
epoch 1923 - batch 2/3, discriminator_loss=0.000, generator_loss=8.551
1/1 [=====] - 0s 15ms/step
epoch 1923 - batch 3/3, discriminator_loss=0.000, generator_loss=6.765
1/1 [=====] - 0s 16ms/step
epoch 1924 - batch 1/3, discriminator_loss=0.003, generator_loss=6.008
1/1 [=====] - 0s 15ms/step
epoch 1924 - batch 2/3, discriminator_loss=0.000, generator_loss=10.162
1/1 [=====] - 0s 15ms/step
epoch 1924 - batch 3/3, discriminator_loss=0.002, generator_loss=10.490
1/1 [=====] - 0s 15ms/step
epoch 1925 - batch 1/3, discriminator_loss=0.002, generator_loss=8.938
1/1 [=====] - 0s 22ms/step
epoch 1925 - batch 2/3, discriminator_loss=0.000, generator_loss=8.290
1/1 [=====] - 0s 15ms/step
epoch 1925 - batch 3/3, discriminator_loss=0.020, generator_loss=8.305
1/1 [=====] - 0s 19ms/step
epoch 1926 - batch 1/3, discriminator_loss=0.013, generator_loss=10.308
1/1 [=====] - 0s 17ms/step
epoch 1926 - batch 2/3, discriminator_loss=0.006, generator_loss=9.460
1/1 [=====] - 0s 23ms/step
epoch 1926 - batch 3/3, discriminator_loss=0.033, generator_loss=9.765
1/1 [=====] - 0s 15ms/step
epoch 1927 - batch 1/3, discriminator_loss=0.000, generator_loss=13.286
1/1 [=====] - 0s 17ms/step
epoch 1927 - batch 2/3, discriminator_loss=0.000, generator_loss=14.565
1/1 [=====] - 0s 23ms/step
epoch 1927 - batch 3/3, discriminator_loss=0.001, generator_loss=15.061
1/1 [=====] - 0s 15ms/step
epoch 1928 - batch 1/3, discriminator_loss=0.000, generator_loss=17.878
1/1 [=====] - 0s 15ms/step

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epoch 1928 - batch 2/3, discriminator\_loss=0.027, generator\_loss=16.334  
1/1 [=====] - 0s 16ms/step  
epoch 1928 - batch 3/3, discriminator\_loss=0.053, generator\_loss=12.953  
1/1 [=====] - 0s 16ms/step  
epoch 1929 - batch 1/3, discriminator\_loss=0.000, generator\_loss=13.854  
1/1 [=====] - 0s 18ms/step  
epoch 1929 - batch 2/3, discriminator\_loss=0.032, generator\_loss=9.232  
1/1 [=====] - 0s 15ms/step  
epoch 1929 - batch 3/3, discriminator\_loss=0.004, generator\_loss=8.803  
1/1 [=====] - 0s 15ms/step  
epoch 1930 - batch 1/3, discriminator\_loss=0.000, generator\_loss=8.099  
1/1 [=====] - 0s 16ms/step  
epoch 1930 - batch 2/3, discriminator\_loss=0.163, generator\_loss=10.295  
1/1 [=====] - 0s 17ms/step  
epoch 1930 - batch 3/3, discriminator\_loss=0.000, generator\_loss=16.648  
1/1 [=====] - 0s 15ms/step  
epoch 1931 - batch 1/3, discriminator\_loss=0.004, generator\_loss=16.145  
1/1 [=====] - 0s 17ms/step  
epoch 1931 - batch 2/3, discriminator\_loss=0.000, generator\_loss=20.315  
1/1 [=====] - 0s 18ms/step  
epoch 1931 - batch 3/3, discriminator\_loss=0.000, generator\_loss=20.405  
1/1 [=====] - 0s 15ms/step  
epoch 1932 - batch 1/3, discriminator\_loss=0.000, generator\_loss=23.294  
1/1 [=====] - 0s 15ms/step  
epoch 1932 - batch 2/3, discriminator\_loss=0.000, generator\_loss=23.263  
1/1 [=====] - 0s 22ms/step  
epoch 1932 - batch 3/3, discriminator\_loss=0.000, generator\_loss=28.395  
1/1 [=====] - 0s 16ms/step  
epoch 1933 - batch 1/3, discriminator\_loss=0.000, generator\_loss=28.413  
1/1 [=====] - 0s 17ms/step  
epoch 1933 - batch 2/3, discriminator\_loss=0.247, generator\_loss=27.219  
1/1 [=====] - 0s 22ms/step  
epoch 1933 - batch 3/3, discriminator\_loss=0.104, generator\_loss=22.918  
1/1 [=====] - 0s 15ms/step  
epoch 1934 - batch 1/3, discriminator\_loss=0.000, generator\_loss=22.277  
1/1 [=====] - 0s 22ms/step  
epoch 1934 - batch 2/3, discriminator\_loss=0.162, generator\_loss=16.097  
1/1 [=====] - 0s 18ms/step  
epoch 1934 - batch 3/3, discriminator\_loss=0.003, generator\_loss=13.228  
1/1 [=====] - 0s 15ms/step  
epoch 1935 - batch 1/3, discriminator\_loss=0.041, generator\_loss=8.745  
1/1 [=====] - 0s 16ms/step  
epoch 1935 - batch 2/3, discriminator\_loss=0.053, generator\_loss=9.616  
1/1 [=====] - 0s 15ms/step  
epoch 1935 - batch 3/3, discriminator\_loss=0.017, generator\_loss=8.285  
1/1 [=====] - 0s 18ms/step  
epoch 1936 - batch 1/3, discriminator\_loss=0.019, generator\_loss=11.279  
1/1 [=====] - 0s 15ms/step

epoch 1936 - batch 2/3, discriminator\_loss=0.032, generator\_loss=14.823  
 1/1 [=====] - 0s 19ms/step  
 epoch 1936 - batch 3/3, discriminator\_loss=0.001, generator\_loss=18.617  
 1/1 [=====] - 0s 15ms/step  
 epoch 1937 - batch 1/3, discriminator\_loss=0.002, generator\_loss=19.104  
 1/1 [=====] - 0s 15ms/step  
 epoch 1937 - batch 2/3, discriminator\_loss=0.001, generator\_loss=22.193  
 1/1 [=====] - 0s 17ms/step  
 epoch 1937 - batch 3/3, discriminator\_loss=0.004, generator\_loss=23.908  
 1/1 [=====] - 0s 15ms/step  
 epoch 1938 - batch 1/3, discriminator\_loss=0.000, generator\_loss=25.243  
 1/1 [=====] - 0s 16ms/step  
 epoch 1938 - batch 2/3, discriminator\_loss=0.000, generator\_loss=26.091  
 1/1 [=====] - 0s 20ms/step  
 epoch 1938 - batch 3/3, discriminator\_loss=0.000, generator\_loss=26.676  
 1/1 [=====] - 0s 17ms/step  
 epoch 1939 - batch 1/3, discriminator\_loss=0.095, generator\_loss=25.461  
 1/1 [=====] - 0s 18ms/step  
 epoch 1939 - batch 2/3, discriminator\_loss=0.249, generator\_loss=21.606  
 1/1 [=====] - 0s 18ms/step  
 epoch 1939 - batch 3/3, discriminator\_loss=0.001, generator\_loss=18.926  
 1/1 [=====] - 0s 15ms/step  
 epoch 1940 - batch 1/3, discriminator\_loss=0.003, generator\_loss=14.383  
 1/1 [=====] - 0s 19ms/step  
 epoch 1940 - batch 2/3, discriminator\_loss=0.001, generator\_loss=12.574  
 1/1 [=====] - 0s 15ms/step  
 epoch 1940 - batch 3/3, discriminator\_loss=0.003, generator\_loss=10.661  
 1/1 [=====] - 0s 16ms/step  
 epoch 1941 - batch 1/3, discriminator\_loss=0.050, generator\_loss=9.685  
 1/1 [=====] - 0s 15ms/step  
 epoch 1941 - batch 2/3, discriminator\_loss=0.148, generator\_loss=14.451  
 1/1 [=====] - 0s 17ms/step  
 epoch 1941 - batch 3/3, discriminator\_loss=0.001, generator\_loss=16.621  
 4/4 [=====] - 0s 50ms/step  
 Accuracy réelle : 93%, fausse : 100%  
 1/1 [=====] - 0s 15ms/step  
 epoch 1942 - batch 1/3, discriminator\_loss=0.002, generator\_loss=20.927  
 1/1 [=====] - 0s 17ms/step  
 epoch 1942 - batch 2/3, discriminator\_loss=0.025, generator\_loss=21.507  
 1/1 [=====] - 0s 18ms/step  
 epoch 1942 - batch 3/3, discriminator\_loss=0.042, generator\_loss=21.283  
 1/1 [=====] - 0s 17ms/step  
 epoch 1943 - batch 1/3, discriminator\_loss=0.000, generator\_loss=20.700  
 1/1 [=====] - 0s 19ms/step  
 epoch 1943 - batch 2/3, discriminator\_loss=0.000, generator\_loss=20.242  
 1/1 [=====] - 0s 17ms/step  
 epoch 1943 - batch 3/3, discriminator\_loss=0.188, generator\_loss=16.617  
 1/1 [=====] - 0s 21ms/step



epoch 1944 - batch 1/3, discriminator\_loss=0.120, generator\_loss=10.859  
1/1 [=====] - 0s 16ms/step  
epoch 1944 - batch 2/3, discriminator\_loss=0.001, generator\_loss=5.732  
1/1 [=====] - 0s 16ms/step  
epoch 1944 - batch 3/3, discriminator\_loss=0.314, generator\_loss=3.846  
1/1 [=====] - 0s 19ms/step  
epoch 1945 - batch 1/3, discriminator\_loss=0.014, generator\_loss=2.865  
1/1 [=====] - 0s 15ms/step  
epoch 1945 - batch 2/3, discriminator\_loss=0.140, generator\_loss=5.798  
1/1 [=====] - 0s 15ms/step  
epoch 1945 - batch 3/3, discriminator\_loss=0.001, generator\_loss=9.451  
1/1 [=====] - 0s 15ms/step  
epoch 1946 - batch 1/3, discriminator\_loss=0.009, generator\_loss=11.311  
1/1 [=====] - 0s 15ms/step  
epoch 1946 - batch 2/3, discriminator\_loss=0.000, generator\_loss=15.071  
1/1 [=====] - 0s 15ms/step  
epoch 1946 - batch 3/3, discriminator\_loss=0.002, generator\_loss=15.794  
1/1 [=====] - 0s 15ms/step  
epoch 1947 - batch 1/3, discriminator\_loss=0.000, generator\_loss=20.068  
1/1 [=====] - 0s 15ms/step  
epoch 1947 - batch 2/3, discriminator\_loss=0.054, generator\_loss=17.267  
1/1 [=====] - 0s 15ms/step  
epoch 1947 - batch 3/3, discriminator\_loss=0.003, generator\_loss=16.805  
1/1 [=====] - 0s 16ms/step  
epoch 1948 - batch 1/3, discriminator\_loss=0.000, generator\_loss=17.888  
1/1 [=====] - 0s 17ms/step  
epoch 1948 - batch 2/3, discriminator\_loss=0.038, generator\_loss=16.360  
1/1 [=====] - 0s 16ms/step  
epoch 1948 - batch 3/3, discriminator\_loss=0.000, generator\_loss=14.574  
1/1 [=====] - 0s 18ms/step  
epoch 1949 - batch 1/3, discriminator\_loss=0.000, generator\_loss=12.211  
1/1 [=====] - 0s 15ms/step  
epoch 1949 - batch 2/3, discriminator\_loss=0.000, generator\_loss=11.343  
1/1 [=====] - 0s 17ms/step  
epoch 1949 - batch 3/3, discriminator\_loss=0.000, generator\_loss=12.144  
1/1 [=====] - 0s 19ms/step  
epoch 1950 - batch 1/3, discriminator\_loss=0.000, generator\_loss=9.284  
1/1 [=====] - 0s 16ms/step  
epoch 1950 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.356  
1/1 [=====] - 0s 21ms/step  
epoch 1950 - batch 3/3, discriminator\_loss=0.001, generator\_loss=6.744  
1/1 [=====] - 0s 15ms/step  
epoch 1951 - batch 1/3, discriminator\_loss=0.003, generator\_loss=5.070  
1/1 [=====] - 0s 15ms/step  
epoch 1951 - batch 2/3, discriminator\_loss=0.003, generator\_loss=4.514  
1/1 [=====] - 0s 17ms/step  
epoch 1951 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.662  
1/1 [=====] - 0s 15ms/step

epoch 1952 - batch 1/3, discriminator\_loss=0.001, generator\_loss=3.500  
1/1 [=====] - 0s 15ms/step  
epoch 1952 - batch 2/3, discriminator\_loss=0.005, generator\_loss=3.904  
1/1 [=====] - 0s 15ms/step  
epoch 1952 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.787  
1/1 [=====] - 0s 17ms/step  
epoch 1953 - batch 1/3, discriminator\_loss=0.000, generator\_loss=4.237  
1/1 [=====] - 0s 15ms/step  
epoch 1953 - batch 2/3, discriminator\_loss=0.001, generator\_loss=4.119  
1/1 [=====] - 0s 16ms/step  
epoch 1953 - batch 3/3, discriminator\_loss=0.002, generator\_loss=4.147  
1/1 [=====] - 0s 15ms/step  
epoch 1954 - batch 1/3, discriminator\_loss=0.001, generator\_loss=3.808  
1/1 [=====] - 0s 15ms/step  
epoch 1954 - batch 2/3, discriminator\_loss=0.002, generator\_loss=4.243  
1/1 [=====] - 0s 15ms/step  
epoch 1954 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.885  
1/1 [=====] - 0s 17ms/step  
epoch 1955 - batch 1/3, discriminator\_loss=0.005, generator\_loss=5.327  
1/1 [=====] - 0s 15ms/step  
epoch 1955 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.040  
1/1 [=====] - 0s 15ms/step  
epoch 1955 - batch 3/3, discriminator\_loss=0.001, generator\_loss=5.319  
1/1 [=====] - 0s 15ms/step  
epoch 1956 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.589  
1/1 [=====] - 0s 15ms/step  
epoch 1956 - batch 2/3, discriminator\_loss=0.001, generator\_loss=6.102  
1/1 [=====] - 0s 18ms/step  
epoch 1956 - batch 3/3, discriminator\_loss=0.002, generator\_loss=5.919  
1/1 [=====] - 0s 16ms/step  
epoch 1957 - batch 1/3, discriminator\_loss=0.001, generator\_loss=7.077  
1/1 [=====] - 0s 23ms/step  
epoch 1957 - batch 2/3, discriminator\_loss=0.004, generator\_loss=7.720  
1/1 [=====] - 0s 16ms/step  
epoch 1957 - batch 3/3, discriminator\_loss=0.003, generator\_loss=6.918  
1/1 [=====] - 0s 15ms/step  
epoch 1958 - batch 1/3, discriminator\_loss=0.009, generator\_loss=6.454  
1/1 [=====] - 0s 15ms/step  
epoch 1958 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.415  
1/1 [=====] - 0s 16ms/step  
epoch 1958 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.969  
1/1 [=====] - 0s 16ms/step  
epoch 1959 - batch 1/3, discriminator\_loss=0.001, generator\_loss=7.493  
1/1 [=====] - 0s 16ms/step  
epoch 1959 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.562  
1/1 [=====] - 0s 15ms/step  
epoch 1959 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.246  
1/1 [=====] - 0s 15ms/step

epoch 1960 - batch 1/3, discriminator\_loss=0.002, generator\_loss=4.033  
 1/1 [=====] - 0s 20ms/step  
 epoch 1960 - batch 2/3, discriminator\_loss=0.001, generator\_loss=5.919  
 1/1 [=====] - 0s 15ms/step  
 epoch 1960 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.624  
 1/1 [=====] - 0s 15ms/step  
 epoch 1961 - batch 1/3, discriminator\_loss=0.001, generator\_loss=4.594  
 1/1 [=====] - 0s 15ms/step  
 epoch 1961 - batch 2/3, discriminator\_loss=0.001, generator\_loss=5.633  
 1/1 [=====] - 0s 15ms/step  
 epoch 1961 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.396  
 4/4 [=====] - 0s 51ms/step  
 Accuracy réelle : 100%, fausse : 97%  
 1/1 [=====] - 0s 15ms/step  
 epoch 1962 - batch 1/3, discriminator\_loss=0.003, generator\_loss=5.579  
 1/1 [=====] - 0s 19ms/step  
 epoch 1962 - batch 2/3, discriminator\_loss=0.001, generator\_loss=5.326  
 1/1 [=====] - 0s 15ms/step  
 epoch 1962 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.083  
 1/1 [=====] - 0s 21ms/step  
 epoch 1963 - batch 1/3, discriminator\_loss=0.001, generator\_loss=5.320  
 1/1 [=====] - 0s 15ms/step  
 epoch 1963 - batch 2/3, discriminator\_loss=0.000, generator\_loss=10.727  
 1/1 [=====] - 0s 15ms/step  
 epoch 1963 - batch 3/3, discriminator\_loss=0.000, generator\_loss=7.450  
 1/1 [=====] - 0s 17ms/step  
 epoch 1964 - batch 1/3, discriminator\_loss=0.001, generator\_loss=8.661  
 1/1 [=====] - 0s 15ms/step  
 epoch 1964 - batch 2/3, discriminator\_loss=0.001, generator\_loss=6.587  
 1/1 [=====] - 0s 16ms/step  
 epoch 1964 - batch 3/3, discriminator\_loss=0.000, generator\_loss=7.808  
 1/1 [=====] - 0s 18ms/step  
 epoch 1965 - batch 1/3, discriminator\_loss=0.003, generator\_loss=5.844  
 1/1 [=====] - 0s 16ms/step  
 epoch 1965 - batch 2/3, discriminator\_loss=0.000, generator\_loss=7.923  
 1/1 [=====] - 0s 15ms/step  
 epoch 1965 - batch 3/3, discriminator\_loss=0.001, generator\_loss=6.422  
 1/1 [=====] - 0s 18ms/step  
 epoch 1966 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.457  
 1/1 [=====] - 0s 15ms/step  
 epoch 1966 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.148  
 1/1 [=====] - 0s 17ms/step  
 epoch 1966 - batch 3/3, discriminator\_loss=0.006, generator\_loss=7.343  
 1/1 [=====] - 0s 18ms/step  
 epoch 1967 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.721  
 1/1 [=====] - 0s 15ms/step  
 epoch 1967 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.314  
 1/1 [=====] - 0s 17ms/step

epoch 1967 - batch 3/3, discriminator\_loss=0.000, generator\_loss=9.139  
 1/1 [=====] - 0s 15ms/step  
 epoch 1968 - batch 1/3, discriminator\_loss=0.061, generator\_loss=9.075  
 1/1 [=====] - 0s 15ms/step  
 epoch 1968 - batch 2/3, discriminator\_loss=0.000, generator\_loss=13.457  
 1/1 [=====] - 0s 15ms/step  
 epoch 1968 - batch 3/3, discriminator\_loss=0.100, generator\_loss=12.513  
 1/1 [=====] - 0s 15ms/step  
 epoch 1969 - batch 1/3, discriminator\_loss=0.020, generator\_loss=8.596  
 1/1 [=====] - 0s 17ms/step  
 epoch 1969 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.939  
 1/1 [=====] - 0s 15ms/step  
 epoch 1969 - batch 3/3, discriminator\_loss=0.001, generator\_loss=3.822  
 1/1 [=====] - 0s 15ms/step  
 epoch 1970 - batch 1/3, discriminator\_loss=0.002, generator\_loss=2.088  
 1/1 [=====] - 0s 17ms/step  
 epoch 1970 - batch 2/3, discriminator\_loss=0.001, generator\_loss=1.107  
 1/1 [=====] - 0s 16ms/step  
 epoch 1970 - batch 3/3, discriminator\_loss=0.006, generator\_loss=0.627  
 1/1 [=====] - 0s 15ms/step  
 epoch 1971 - batch 1/3, discriminator\_loss=0.004, generator\_loss=0.379  
 1/1 [=====] - 0s 15ms/step  
 epoch 1971 - batch 2/3, discriminator\_loss=0.020, generator\_loss=0.541  
 1/1 [=====] - 0s 17ms/step  
 epoch 1971 - batch 3/3, discriminator\_loss=0.002, generator\_loss=1.184  
 1/1 [=====] - 0s 19ms/step  
 epoch 1972 - batch 1/3, discriminator\_loss=0.004, generator\_loss=1.314  
 1/1 [=====] - 0s 17ms/step  
 epoch 1972 - batch 2/3, discriminator\_loss=0.016, generator\_loss=2.472  
 1/1 [=====] - 0s 16ms/step  
 epoch 1972 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.990  
 1/1 [=====] - 0s 16ms/step  
 epoch 1973 - batch 1/3, discriminator\_loss=0.000, generator\_loss=8.755  
 1/1 [=====] - 0s 18ms/step  
 epoch 1973 - batch 2/3, discriminator\_loss=0.005, generator\_loss=6.198  
 1/1 [=====] - 0s 18ms/step  
 epoch 1973 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.449  
 1/1 [=====] - 0s 15ms/step  
 epoch 1974 - batch 1/3, discriminator\_loss=0.001, generator\_loss=7.910  
 1/1 [=====] - 0s 16ms/step  
 epoch 1974 - batch 2/3, discriminator\_loss=0.000, generator\_loss=7.920  
 1/1 [=====] - 0s 15ms/step  
 epoch 1974 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.570  
 1/1 [=====] - 0s 16ms/step  
 epoch 1975 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.572  
 1/1 [=====] - 0s 16ms/step  
 epoch 1975 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.471  
 1/1 [=====] - 0s 16ms/step

epoch 1975 - batch 3/3, discriminator\_loss=0.000, generator\_loss=9.730  
1/1 [=====] - 0s 17ms/step  
epoch 1976 - batch 1/3, discriminator\_loss=0.011, generator\_loss=8.906  
1/1 [=====] - 0s 15ms/step  
epoch 1976 - batch 2/3, discriminator\_loss=0.000, generator\_loss=9.168  
1/1 [=====] - 0s 16ms/step  
epoch 1976 - batch 3/3, discriminator\_loss=0.000, generator\_loss=7.900  
1/1 [=====] - 0s 15ms/step  
epoch 1977 - batch 1/3, discriminator\_loss=0.000, generator\_loss=9.361  
1/1 [=====] - 0s 18ms/step  
epoch 1977 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.624  
1/1 [=====] - 0s 15ms/step  
epoch 1977 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.887  
1/1 [=====] - 0s 22ms/step  
epoch 1978 - batch 1/3, discriminator\_loss=0.000, generator\_loss=8.544  
1/1 [=====] - 0s 15ms/step  
epoch 1978 - batch 2/3, discriminator\_loss=0.011, generator\_loss=6.081  
1/1 [=====] - 0s 15ms/step  
epoch 1978 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.429  
1/1 [=====] - 0s 15ms/step  
epoch 1979 - batch 1/3, discriminator\_loss=0.009, generator\_loss=3.563  
1/1 [=====] - 0s 23ms/step  
epoch 1979 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.162  
1/1 [=====] - 0s 15ms/step  
epoch 1979 - batch 3/3, discriminator\_loss=0.001, generator\_loss=1.001  
1/1 [=====] - 0s 22ms/step  
epoch 1980 - batch 1/3, discriminator\_loss=0.006, generator\_loss=0.738  
1/1 [=====] - 0s 15ms/step  
epoch 1980 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.370  
1/1 [=====] - 0s 15ms/step  
epoch 1980 - batch 3/3, discriminator\_loss=0.001, generator\_loss=0.163  
1/1 [=====] - 0s 17ms/step  
epoch 1981 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.152  
1/1 [=====] - 0s 17ms/step  
epoch 1981 - batch 2/3, discriminator\_loss=0.001, generator\_loss=0.228  
1/1 [=====] - 0s 17ms/step  
epoch 1981 - batch 3/3, discriminator\_loss=0.002, generator\_loss=0.136  
4/4 [=====] - 0s 51ms/step  
Accuracy réelle : 100%, fausse : 9%  
1/1 [=====] - 0s 16ms/step  
epoch 1982 - batch 1/3, discriminator\_loss=0.001, generator\_loss=0.213  
1/1 [=====] - 0s 15ms/step  
epoch 1982 - batch 2/3, discriminator\_loss=0.001, generator\_loss=0.143  
1/1 [=====] - 0s 15ms/step  
epoch 1982 - batch 3/3, discriminator\_loss=0.003, generator\_loss=0.097  
1/1 [=====] - 0s 15ms/step  
epoch 1983 - batch 1/3, discriminator\_loss=0.005, generator\_loss=0.369  
1/1 [=====] - 0s 15ms/step

epoch 1983 - batch 2/3, discriminator\_loss=0.002, generator\_loss=0.309  
1/1 [=====] - 0s 15ms/step  
epoch 1983 - batch 3/3, discriminator\_loss=0.001, generator\_loss=0.545  
1/1 [=====] - 0s 18ms/step  
epoch 1984 - batch 1/3, discriminator\_loss=0.001, generator\_loss=0.962  
1/1 [=====] - 0s 24ms/step  
epoch 1984 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.757  
1/1 [=====] - 0s 18ms/step  
epoch 1984 - batch 3/3, discriminator\_loss=0.000, generator\_loss=7.625  
1/1 [=====] - 0s 15ms/step  
epoch 1985 - batch 1/3, discriminator\_loss=0.000, generator\_loss=4.966  
1/1 [=====] - 0s 15ms/step  
epoch 1985 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.808  
1/1 [=====] - 0s 15ms/step  
epoch 1985 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.916  
1/1 [=====] - 0s 15ms/step  
epoch 1986 - batch 1/3, discriminator\_loss=0.001, generator\_loss=6.388  
1/1 [=====] - 0s 17ms/step  
epoch 1986 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.665  
1/1 [=====] - 0s 16ms/step  
epoch 1986 - batch 3/3, discriminator\_loss=0.001, generator\_loss=3.779  
1/1 [=====] - 0s 24ms/step  
epoch 1987 - batch 1/3, discriminator\_loss=0.001, generator\_loss=2.138  
1/1 [=====] - 0s 16ms/step  
epoch 1987 - batch 2/3, discriminator\_loss=0.016, generator\_loss=4.699  
1/1 [=====] - 0s 15ms/step  
epoch 1987 - batch 3/3, discriminator\_loss=0.000, generator\_loss=7.175  
1/1 [=====] - 0s 16ms/step  
epoch 1988 - batch 1/3, discriminator\_loss=0.000, generator\_loss=13.615  
1/1 [=====] - 0s 15ms/step  
epoch 1988 - batch 2/3, discriminator\_loss=0.001, generator\_loss=10.585  
1/1 [=====] - 0s 16ms/step  
epoch 1988 - batch 3/3, discriminator\_loss=0.017, generator\_loss=9.947  
1/1 [=====] - 0s 15ms/step  
epoch 1989 - batch 1/3, discriminator\_loss=0.000, generator\_loss=9.082  
1/1 [=====] - 0s 15ms/step  
epoch 1989 - batch 2/3, discriminator\_loss=0.000, generator\_loss=7.997  
1/1 [=====] - 0s 16ms/step  
epoch 1989 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.094  
1/1 [=====] - 0s 15ms/step  
epoch 1990 - batch 1/3, discriminator\_loss=0.001, generator\_loss=6.147  
1/1 [=====] - 0s 16ms/step  
epoch 1990 - batch 2/3, discriminator\_loss=0.002, generator\_loss=7.204  
1/1 [=====] - 0s 15ms/step  
epoch 1990 - batch 3/3, discriminator\_loss=0.000, generator\_loss=7.174  
1/1 [=====] - 0s 15ms/step  
epoch 1991 - batch 1/3, discriminator\_loss=0.023, generator\_loss=4.901  
1/1 [=====] - 0s 16ms/step

epoch 1991 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.803  
 1/1 [=====] - 0s 15ms/step  
 epoch 1991 - batch 3/3, discriminator\_loss=0.005, generator\_loss=5.197  
 1/1 [=====] - 0s 15ms/step  
 epoch 1992 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.686  
 1/1 [=====] - 0s 16ms/step  
 epoch 1992 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.956  
 1/1 [=====] - 0s 15ms/step  
 epoch 1992 - batch 3/3, discriminator\_loss=0.004, generator\_loss=1.026  
 1/1 [=====] - 0s 15ms/step  
 epoch 1993 - batch 1/3, discriminator\_loss=0.005, generator\_loss=0.437  
 1/1 [=====] - 0s 19ms/step  
 epoch 1993 - batch 2/3, discriminator\_loss=0.020, generator\_loss=0.881  
 1/1 [=====] - 0s 21ms/step  
 epoch 1993 - batch 3/3, discriminator\_loss=0.006, generator\_loss=0.909  
 1/1 [=====] - 0s 23ms/step  
 epoch 1994 - batch 1/3, discriminator\_loss=0.006, generator\_loss=1.931  
 1/1 [=====] - 0s 18ms/step  
 epoch 1994 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.338  
 1/1 [=====] - 0s 18ms/step  
 epoch 1994 - batch 3/3, discriminator\_loss=0.000, generator\_loss=9.465  
 1/1 [=====] - 0s 18ms/step  
 epoch 1995 - batch 1/3, discriminator\_loss=0.000, generator\_loss=10.114  
 1/1 [=====] - 0s 15ms/step  
 epoch 1995 - batch 2/3, discriminator\_loss=0.000, generator\_loss=9.925  
 1/1 [=====] - 0s 17ms/step  
 epoch 1995 - batch 3/3, discriminator\_loss=0.000, generator\_loss=11.074  
 1/1 [=====] - 0s 17ms/step  
 epoch 1996 - batch 1/3, discriminator\_loss=0.000, generator\_loss=10.284  
 1/1 [=====] - 0s 15ms/step  
 epoch 1996 - batch 2/3, discriminator\_loss=0.000, generator\_loss=12.025  
 1/1 [=====] - 0s 18ms/step  
 epoch 1996 - batch 3/3, discriminator\_loss=0.000, generator\_loss=17.631  
 1/1 [=====] - 0s 17ms/step  
 epoch 1997 - batch 1/3, discriminator\_loss=0.000, generator\_loss=13.328  
 1/1 [=====] - 0s 18ms/step  
 epoch 1997 - batch 2/3, discriminator\_loss=0.000, generator\_loss=17.686  
 1/1 [=====] - 0s 18ms/step  
 epoch 1997 - batch 3/3, discriminator\_loss=0.000, generator\_loss=13.846  
 1/1 [=====] - 0s 22ms/step  
 epoch 1998 - batch 1/3, discriminator\_loss=0.000, generator\_loss=15.822  
 1/1 [=====] - 0s 15ms/step  
 epoch 1998 - batch 2/3, discriminator\_loss=0.000, generator\_loss=13.676  
 1/1 [=====] - 0s 16ms/step  
 epoch 1998 - batch 3/3, discriminator\_loss=0.000, generator\_loss=15.377  
 1/1 [=====] - 0s 15ms/step  
 epoch 1999 - batch 1/3, discriminator\_loss=0.000, generator\_loss=16.877  
 1/1 [=====] - 0s 15ms/step

epoch 1999 - batch 2/3, discriminator\_loss=0.111, generator\_loss=13.148  
 1/1 [=====] - 0s 16ms/step  
 epoch 1999 - batch 3/3, discriminator\_loss=0.000, generator\_loss=11.032  
 1/1 [=====] - 0s 15ms/step  
 epoch 2000 - batch 1/3, discriminator\_loss=0.000, generator\_loss=9.905  
 1/1 [=====] - 0s 17ms/step  
 epoch 2000 - batch 2/3, discriminator\_loss=0.002, generator\_loss=7.447  
 1/1 [=====] - 0s 17ms/step  
 epoch 2000 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.606  
 1/1 [=====] - 0s 16ms/step  
 epoch 2001 - batch 1/3, discriminator\_loss=0.001, generator\_loss=4.829  
 1/1 [=====] - 0s 22ms/step  
 epoch 2001 - batch 2/3, discriminator\_loss=0.002, generator\_loss=4.517  
 1/1 [=====] - 0s 17ms/step  
 epoch 2001 - batch 3/3, discriminator\_loss=0.005, generator\_loss=3.760  
 4/4 [=====] - 0s 51ms/step  
 Accuracy réelle : 100%, fausse : 94%  
 4/4 [=====] - 0s 63ms/step  
 Accuracy réelle : 100%, fausse : 92%  
 1/1 [=====] - 0s 16ms/step  
 epoch 2002 - batch 1/3, discriminator\_loss=0.056, generator\_loss=6.513  
 1/1 [=====] - 0s 15ms/step  
 epoch 2002 - batch 2/3, discriminator\_loss=0.002, generator\_loss=10.018  
 1/1 [=====] - 0s 23ms/step  
 epoch 2002 - batch 3/3, discriminator\_loss=0.000, generator\_loss=14.423  
 1/1 [=====] - 0s 20ms/step  
 epoch 2003 - batch 1/3, discriminator\_loss=0.000, generator\_loss=13.829  
 1/1 [=====] - 0s 15ms/step  
 epoch 2003 - batch 2/3, discriminator\_loss=0.026, generator\_loss=13.568  
 1/1 [=====] - 0s 18ms/step  
 epoch 2003 - batch 3/3, discriminator\_loss=0.013, generator\_loss=14.901  
 1/1 [=====] - 0s 15ms/step  
 epoch 2004 - batch 1/3, discriminator\_loss=0.000, generator\_loss=12.751  
 1/1 [=====] - 0s 15ms/step  
 epoch 2004 - batch 2/3, discriminator\_loss=0.000, generator\_loss=13.452  
 1/1 [=====] - 0s 27ms/step  
 epoch 2004 - batch 3/3, discriminator\_loss=0.001, generator\_loss=10.908  
 1/1 [=====] - 0s 15ms/step  
 epoch 2005 - batch 1/3, discriminator\_loss=0.009, generator\_loss=9.766  
 1/1 [=====] - 0s 15ms/step  
 epoch 2005 - batch 2/3, discriminator\_loss=0.002, generator\_loss=10.675  
 1/1 [=====] - 0s 19ms/step  
 epoch 2005 - batch 3/3, discriminator\_loss=0.001, generator\_loss=12.449  
 1/1 [=====] - 0s 15ms/step  
 epoch 2006 - batch 1/3, discriminator\_loss=0.000, generator\_loss=10.646  
 1/1 [=====] - 0s 15ms/step  
 epoch 2006 - batch 2/3, discriminator\_loss=0.002, generator\_loss=10.547  
 1/1 [=====] - 0s 15ms/step



epoch 2006 - batch 3/3, discriminator\_loss=0.275, generator\_loss=10.010  
1/1 [=====] - 0s 16ms/step  
epoch 2007 - batch 1/3, discriminator\_loss=0.000, generator\_loss=12.447  
1/1 [=====] - 0s 15ms/step  
epoch 2007 - batch 2/3, discriminator\_loss=0.311, generator\_loss=9.604  
1/1 [=====] - 0s 21ms/step  
epoch 2007 - batch 3/3, discriminator\_loss=0.001, generator\_loss=7.504  
1/1 [=====] - 0s 16ms/step  
epoch 2008 - batch 1/3, discriminator\_loss=0.000, generator\_loss=9.260  
1/1 [=====] - 0s 15ms/step  
epoch 2008 - batch 2/3, discriminator\_loss=0.003, generator\_loss=7.925  
1/1 [=====] - 0s 16ms/step  
epoch 2008 - batch 3/3, discriminator\_loss=0.003, generator\_loss=9.088  
1/1 [=====] - 0s 15ms/step  
epoch 2009 - batch 1/3, discriminator\_loss=0.000, generator\_loss=10.691  
1/1 [=====] - 0s 23ms/step  
epoch 2009 - batch 2/3, discriminator\_loss=0.086, generator\_loss=12.758  
1/1 [=====] - 0s 17ms/step  
epoch 2009 - batch 3/3, discriminator\_loss=0.092, generator\_loss=18.423  
1/1 [=====] - 0s 16ms/step  
epoch 2010 - batch 1/3, discriminator\_loss=0.000, generator\_loss=24.131  
1/1 [=====] - 0s 18ms/step  
epoch 2010 - batch 2/3, discriminator\_loss=0.000, generator\_loss=25.184  
1/1 [=====] - 0s 16ms/step  
epoch 2010 - batch 3/3, discriminator\_loss=0.197, generator\_loss=31.977  
1/1 [=====] - 0s 15ms/step  
epoch 2011 - batch 1/3, discriminator\_loss=0.000, generator\_loss=34.292  
1/1 [=====] - 0s 18ms/step  
epoch 2011 - batch 2/3, discriminator\_loss=0.000, generator\_loss=39.468  
1/1 [=====] - 0s 18ms/step  
epoch 2011 - batch 3/3, discriminator\_loss=0.000, generator\_loss=42.979  
1/1 [=====] - 0s 15ms/step  
epoch 2012 - batch 1/3, discriminator\_loss=0.000, generator\_loss=44.773  
1/1 [=====] - 0s 15ms/step  
epoch 2012 - batch 2/3, discriminator\_loss=0.279, generator\_loss=41.969  
1/1 [=====] - 0s 16ms/step  
epoch 2012 - batch 3/3, discriminator\_loss=0.000, generator\_loss=41.689  
1/1 [=====] - 0s 17ms/step  
epoch 2013 - batch 1/3, discriminator\_loss=0.025, generator\_loss=39.302  
1/1 [=====] - 0s 16ms/step  
epoch 2013 - batch 2/3, discriminator\_loss=0.008, generator\_loss=35.492  
1/1 [=====] - 0s 15ms/step  
epoch 2013 - batch 3/3, discriminator\_loss=0.000, generator\_loss=31.815  
1/1 [=====] - 0s 15ms/step  
epoch 2014 - batch 1/3, discriminator\_loss=0.110, generator\_loss=28.698  
1/1 [=====] - 0s 15ms/step  
epoch 2014 - batch 2/3, discriminator\_loss=0.000, generator\_loss=20.998  
1/1 [=====] - 0s 17ms/step

epoch 2014 - batch 3/3, discriminator\_loss=0.006, generator\_loss=19.392  
1/1 [=====] - 0s 15ms/step  
epoch 2015 - batch 1/3, discriminator\_loss=0.040, generator\_loss=16.003  
1/1 [=====] - 0s 19ms/step  
epoch 2015 - batch 2/3, discriminator\_loss=0.065, generator\_loss=18.814  
1/1 [=====] - 0s 16ms/step  
epoch 2015 - batch 3/3, discriminator\_loss=0.061, generator\_loss=21.932  
1/1 [=====] - 0s 18ms/step  
epoch 2016 - batch 1/3, discriminator\_loss=0.040, generator\_loss=23.298  
1/1 [=====] - 0s 19ms/step  
epoch 2016 - batch 2/3, discriminator\_loss=0.003, generator\_loss=24.579  
1/1 [=====] - 0s 15ms/step  
epoch 2016 - batch 3/3, discriminator\_loss=0.000, generator\_loss=23.362  
1/1 [=====] - 0s 15ms/step  
epoch 2017 - batch 1/3, discriminator\_loss=0.218, generator\_loss=22.138  
1/1 [=====] - 0s 18ms/step  
epoch 2017 - batch 2/3, discriminator\_loss=0.009, generator\_loss=17.806  
1/1 [=====] - 0s 17ms/step  
epoch 2017 - batch 3/3, discriminator\_loss=0.000, generator\_loss=10.182  
1/1 [=====] - 0s 15ms/step  
epoch 2018 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.311  
1/1 [=====] - 0s 15ms/step  
epoch 2018 - batch 2/3, discriminator\_loss=0.381, generator\_loss=5.742  
1/1 [=====] - 0s 15ms/step  
epoch 2018 - batch 3/3, discriminator\_loss=0.019, generator\_loss=6.746  
1/1 [=====] - 0s 16ms/step  
epoch 2019 - batch 1/3, discriminator\_loss=0.000, generator\_loss=11.857  
1/1 [=====] - 0s 15ms/step  
epoch 2019 - batch 2/3, discriminator\_loss=0.307, generator\_loss=10.699  
1/1 [=====] - 0s 16ms/step  
epoch 2019 - batch 3/3, discriminator\_loss=0.209, generator\_loss=10.433  
1/1 [=====] - 0s 18ms/step  
epoch 2020 - batch 1/3, discriminator\_loss=0.004, generator\_loss=7.161  
1/1 [=====] - 0s 18ms/step  
epoch 2020 - batch 2/3, discriminator\_loss=0.116, generator\_loss=8.905  
1/1 [=====] - 0s 18ms/step  
epoch 2020 - batch 3/3, discriminator\_loss=0.010, generator\_loss=16.569  
1/1 [=====] - 0s 15ms/step  
epoch 2021 - batch 1/3, discriminator\_loss=0.000, generator\_loss=29.666  
1/1 [=====] - 0s 15ms/step  
epoch 2021 - batch 2/3, discriminator\_loss=0.000, generator\_loss=35.768  
1/1 [=====] - 0s 15ms/step  
epoch 2021 - batch 3/3, discriminator\_loss=0.000, generator\_loss=28.171  
4/4 [=====] - 0s 50ms/step  
Accuracy réelle : 100%, fausse : 100%  
1/1 [=====] - 0s 15ms/step  
epoch 2022 - batch 1/3, discriminator\_loss=0.006, generator\_loss=29.214  
1/1 [=====] - 0s 15ms/step

epoch 2022 - batch 2/3, discriminator\_loss=0.000, generator\_loss=22.846  
1/1 [=====] - 0s 17ms/step  
epoch 2022 - batch 3/3, discriminator\_loss=0.007, generator\_loss=18.963  
1/1 [=====] - 0s 17ms/step  
epoch 2023 - batch 1/3, discriminator\_loss=0.001, generator\_loss=18.499  
1/1 [=====] - 0s 19ms/step  
epoch 2023 - batch 2/3, discriminator\_loss=0.000, generator\_loss=13.817  
1/1 [=====] - 0s 15ms/step  
epoch 2023 - batch 3/3, discriminator\_loss=0.546, generator\_loss=12.029  
1/1 [=====] - 0s 17ms/step  
epoch 2024 - batch 1/3, discriminator\_loss=0.000, generator\_loss=11.432  
1/1 [=====] - 0s 16ms/step  
epoch 2024 - batch 2/3, discriminator\_loss=0.032, generator\_loss=7.186  
1/1 [=====] - 0s 15ms/step  
epoch 2024 - batch 3/3, discriminator\_loss=0.566, generator\_loss=3.855  
1/1 [=====] - 0s 16ms/step  
epoch 2025 - batch 1/3, discriminator\_loss=0.000, generator\_loss=3.755  
1/1 [=====] - 0s 19ms/step  
epoch 2025 - batch 2/3, discriminator\_loss=0.045, generator\_loss=0.728  
1/1 [=====] - 0s 15ms/step  
epoch 2025 - batch 3/3, discriminator\_loss=0.035, generator\_loss=1.036  
1/1 [=====] - 0s 17ms/step  
epoch 2026 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.045  
1/1 [=====] - 0s 16ms/step  
epoch 2026 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.388  
1/1 [=====] - 0s 16ms/step  
epoch 2026 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2027 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.021  
1/1 [=====] - 0s 15ms/step  
epoch 2027 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.039  
1/1 [=====] - 0s 22ms/step  
epoch 2027 - batch 3/3, discriminator\_loss=0.108, generator\_loss=0.068  
1/1 [=====] - 0s 18ms/step  
epoch 2028 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.258  
1/1 [=====] - 0s 15ms/step  
epoch 2028 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.843  
1/1 [=====] - 0s 20ms/step  
epoch 2028 - batch 3/3, discriminator\_loss=0.126, generator\_loss=5.686  
1/1 [=====] - 0s 15ms/step  
epoch 2029 - batch 1/3, discriminator\_loss=0.538, generator\_loss=6.344  
1/1 [=====] - 0s 15ms/step  
epoch 2029 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.743  
1/1 [=====] - 0s 18ms/step  
epoch 2029 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.578  
1/1 [=====] - 0s 15ms/step  
epoch 2030 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.181  
1/1 [=====] - 0s 16ms/step

epoch 2030 - batch 2/3, discriminator\_loss=0.000, generator\_loss=17.525  
1/1 [=====] - 0s 15ms/step  
epoch 2030 - batch 3/3, discriminator\_loss=0.000, generator\_loss=41.338  
1/1 [=====] - 0s 15ms/step  
epoch 2031 - batch 1/3, discriminator\_loss=0.000, generator\_loss=54.806  
1/1 [=====] - 0s 15ms/step  
epoch 2031 - batch 2/3, discriminator\_loss=0.000, generator\_loss=52.790  
1/1 [=====] - 0s 15ms/step  
epoch 2031 - batch 3/3, discriminator\_loss=0.000, generator\_loss=50.905  
1/1 [=====] - 0s 15ms/step  
epoch 2032 - batch 1/3, discriminator\_loss=0.586, generator\_loss=38.059  
1/1 [=====] - 0s 15ms/step  
epoch 2032 - batch 2/3, discriminator\_loss=0.000, generator\_loss=29.437  
1/1 [=====] - 0s 18ms/step  
epoch 2032 - batch 3/3, discriminator\_loss=0.000, generator\_loss=17.654  
1/1 [=====] - 0s 18ms/step  
epoch 2033 - batch 1/3, discriminator\_loss=0.000, generator\_loss=19.558  
1/1 [=====] - 0s 18ms/step  
epoch 2033 - batch 2/3, discriminator\_loss=0.000, generator\_loss=9.768  
1/1 [=====] - 0s 16ms/step  
epoch 2033 - batch 3/3, discriminator\_loss=0.037, generator\_loss=8.029  
1/1 [=====] - 0s 18ms/step  
epoch 2034 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.370  
1/1 [=====] - 0s 16ms/step  
epoch 2034 - batch 2/3, discriminator\_loss=0.004, generator\_loss=1.761  
1/1 [=====] - 0s 16ms/step  
epoch 2034 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.734  
1/1 [=====] - 0s 17ms/step  
epoch 2035 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2035 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.122  
1/1 [=====] - 0s 15ms/step  
epoch 2035 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2036 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2036 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2036 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 18ms/step  
epoch 2037 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2037 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2037 - batch 3/3, discriminator\_loss=0.036, generator\_loss=0.000  
1/1 [=====] - 0s 17ms/step  
epoch 2038 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 17ms/step

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epoch 2038 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2038 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2039 - batch 1/3, discriminator_loss=0.001, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2039 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2039 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2040 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2040 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2040 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2041 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2041 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2041 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
4/4 [=====] - 0s 51ms/step
Accuracy réelle : 100%, fausse : 91%
1/1 [=====] - 0s 15ms/step
epoch 2042 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2042 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2042 - batch 3/3, discriminator_loss=0.002, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2043 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2043 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2043 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2044 - batch 1/3, discriminator_loss=0.000, generator_loss=0.053
1/1 [=====] - 0s 17ms/step
epoch 2044 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2044 - batch 3/3, discriminator_loss=0.023, generator_loss=0.001
1/1 [=====] - 0s 15ms/step
epoch 2045 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2045 - batch 2/3, discriminator_loss=0.000, generator_loss=0.018
1/1 [=====] - 0s 15ms/step
epoch 2045 - batch 3/3, discriminator_loss=0.000, generator_loss=0.821
1/1 [=====] - 0s 15ms/step

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epoch 2046 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.023  
1/1 [=====] - 0s 15ms/step  
epoch 2046 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.016  
1/1 [=====] - 0s 15ms/step  
epoch 2046 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.074  
1/1 [=====] - 0s 18ms/step  
epoch 2047 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.306  
1/1 [=====] - 0s 18ms/step  
epoch 2047 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.927  
1/1 [=====] - 0s 16ms/step  
epoch 2047 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.438  
1/1 [=====] - 0s 16ms/step  
epoch 2048 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.241  
1/1 [=====] - 0s 16ms/step  
epoch 2048 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.177  
1/1 [=====] - 0s 16ms/step  
epoch 2048 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.770  
1/1 [=====] - 0s 18ms/step  
epoch 2049 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.103  
1/1 [=====] - 0s 17ms/step  
epoch 2049 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.321  
1/1 [=====] - 0s 15ms/step  
epoch 2049 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.111  
1/1 [=====] - 0s 15ms/step  
epoch 2050 - batch 1/3, discriminator\_loss=0.299, generator\_loss=0.092  
1/1 [=====] - 0s 18ms/step  
epoch 2050 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.073  
1/1 [=====] - 0s 18ms/step  
epoch 2050 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.026  
1/1 [=====] - 0s 18ms/step  
epoch 2051 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 18ms/step  
epoch 2051 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.354  
1/1 [=====] - 0s 22ms/step  
epoch 2051 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.329  
1/1 [=====] - 0s 15ms/step  
epoch 2052 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.348  
1/1 [=====] - 0s 18ms/step  
epoch 2052 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.004  
1/1 [=====] - 0s 16ms/step  
epoch 2052 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.347  
1/1 [=====] - 0s 21ms/step  
epoch 2053 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2053 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2053 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step

epoch 2054 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.036  
1/1 [=====] - 0s 16ms/step  
epoch 2054 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 17ms/step  
epoch 2054 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.143  
1/1 [=====] - 0s 17ms/step  
epoch 2055 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2055 - batch 2/3, discriminator\_loss=0.066, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2055 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 28ms/step  
epoch 2056 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2056 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.022  
1/1 [=====] - 0s 15ms/step  
epoch 2056 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.073  
1/1 [=====] - 0s 15ms/step  
epoch 2057 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.108  
1/1 [=====] - 0s 15ms/step  
epoch 2057 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.006  
1/1 [=====] - 0s 15ms/step  
epoch 2057 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.573  
1/1 [=====] - 0s 15ms/step  
epoch 2058 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.483  
1/1 [=====] - 0s 15ms/step  
epoch 2058 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.803  
1/1 [=====] - 0s 16ms/step  
epoch 2058 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.246  
1/1 [=====] - 0s 18ms/step  
epoch 2059 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.548  
1/1 [=====] - 0s 15ms/step  
epoch 2059 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.926  
1/1 [=====] - 0s 15ms/step  
epoch 2059 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2060 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.299  
1/1 [=====] - 0s 15ms/step  
epoch 2060 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.175  
1/1 [=====] - 0s 16ms/step  
epoch 2060 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.516  
1/1 [=====] - 0s 16ms/step  
epoch 2061 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.360  
1/1 [=====] - 0s 16ms/step  
epoch 2061 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.186  
1/1 [=====] - 0s 17ms/step  
epoch 2061 - batch 3/3, discriminator\_loss=0.001, generator\_loss=0.000  
4/4 [=====] - 0s 51ms/step

Accuracy réelle : 100%, fausse : 98%

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1/1 [=====] - 0s 15ms/step
epoch 2062 - batch 1/3, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 15ms/step
epoch 2062 - batch 2/3, discriminator_loss=0.000, generator_loss=0.146
1/1 [=====] - 0s 16ms/step
epoch 2062 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2063 - batch 1/3, discriminator_loss=0.000, generator_loss=0.004
1/1 [=====] - 0s 23ms/step
epoch 2063 - batch 2/3, discriminator_loss=0.000, generator_loss=0.306
1/1 [=====] - 0s 17ms/step
epoch 2063 - batch 3/3, discriminator_loss=0.000, generator_loss=0.009
1/1 [=====] - 0s 18ms/step
epoch 2064 - batch 1/3, discriminator_loss=0.030, generator_loss=0.003
1/1 [=====] - 0s 17ms/step
epoch 2064 - batch 2/3, discriminator_loss=0.043, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2064 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2065 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2065 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2065 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2066 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2066 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2066 - batch 3/3, discriminator_loss=0.003, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2067 - batch 1/3, discriminator_loss=0.001, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2067 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2067 - batch 3/3, discriminator_loss=0.001, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2068 - batch 1/3, discriminator_loss=1.584, generator_loss=1.594
1/1 [=====] - 0s 15ms/step
epoch 2068 - batch 2/3, discriminator_loss=0.000, generator_loss=3.092
1/1 [=====] - 0s 15ms/step
epoch 2068 - batch 3/3, discriminator_loss=0.000, generator_loss=6.915
1/1 [=====] - 0s 16ms/step
epoch 2069 - batch 1/3, discriminator_loss=0.467, generator_loss=4.523
1/1 [=====] - 0s 15ms/step
epoch 2069 - batch 2/3, discriminator_loss=0.000, generator_loss=4.586
1/1 [=====] - 0s 16ms/step

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epoch 2069 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.720  
1/1 [=====] - 0s 16ms/step  
epoch 2070 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.361  
1/1 [=====] - 0s 15ms/step  
epoch 2070 - batch 2/3, discriminator\_loss=0.004, generator\_loss=1.719  
1/1 [=====] - 0s 15ms/step  
epoch 2070 - batch 3/3, discriminator\_loss=0.399, generator\_loss=5.931  
1/1 [=====] - 0s 15ms/step  
epoch 2071 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.672  
1/1 [=====] - 0s 16ms/step  
epoch 2071 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.092  
1/1 [=====] - 0s 15ms/step  
epoch 2071 - batch 3/3, discriminator\_loss=0.001, generator\_loss=0.223  
1/1 [=====] - 0s 18ms/step  
epoch 2072 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.436  
1/1 [=====] - 0s 16ms/step  
epoch 2072 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.830  
1/1 [=====] - 0s 22ms/step  
epoch 2072 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.268  
1/1 [=====] - 0s 22ms/step  
epoch 2073 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.611  
1/1 [=====] - 0s 26ms/step  
epoch 2073 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.730  
1/1 [=====] - 0s 21ms/step  
epoch 2073 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 21ms/step  
epoch 2074 - batch 1/3, discriminator\_loss=0.502, generator\_loss=0.000  
1/1 [=====] - 0s 23ms/step  
epoch 2074 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.320  
1/1 [=====] - 0s 27ms/step  
epoch 2074 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.831  
1/1 [=====] - 0s 15ms/step  
epoch 2075 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.264  
1/1 [=====] - 0s 16ms/step  
epoch 2075 - batch 2/3, discriminator\_loss=0.012, generator\_loss=0.701  
1/1 [=====] - 0s 17ms/step  
epoch 2075 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.997  
1/1 [=====] - 0s 15ms/step  
epoch 2076 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.826  
1/1 [=====] - 0s 15ms/step  
epoch 2076 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.511  
1/1 [=====] - 0s 18ms/step  
epoch 2076 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.853  
1/1 [=====] - 0s 17ms/step  
epoch 2077 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.477  
1/1 [=====] - 0s 18ms/step  
epoch 2077 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.106  
1/1 [=====] - 0s 18ms/step

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epoch 2077 - batch 3/3, discriminator_loss=0.000, generator_loss=0.833
1/1 [=====] - 0s 15ms/step
epoch 2078 - batch 1/3, discriminator_loss=0.000, generator_loss=1.373
1/1 [=====] - 0s 17ms/step
epoch 2078 - batch 2/3, discriminator_loss=0.000, generator_loss=0.613
1/1 [=====] - 0s 16ms/step
epoch 2078 - batch 3/3, discriminator_loss=0.192, generator_loss=1.082
1/1 [=====] - 0s 19ms/step
epoch 2079 - batch 1/3, discriminator_loss=0.000, generator_loss=1.247
1/1 [=====] - 0s 16ms/step
epoch 2079 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2079 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2080 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2080 - batch 2/3, discriminator_loss=0.000, generator_loss=0.873
1/1 [=====] - 0s 17ms/step
epoch 2080 - batch 3/3, discriminator_loss=0.003, generator_loss=0.846
1/1 [=====] - 0s 15ms/step
epoch 2081 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2081 - batch 2/3, discriminator_loss=0.000, generator_loss=0.015
1/1 [=====] - 0s 23ms/step
epoch 2081 - batch 3/3, discriminator_loss=0.167, generator_loss=0.000
4/4 [=====] - 0s 52ms/step
Accuracy réelle : 100%, fausse : 51%
1/1 [=====] - 0s 15ms/step
epoch 2082 - batch 1/3, discriminator_loss=0.118, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2082 - batch 2/3, discriminator_loss=0.001, generator_loss=0.077
1/1 [=====] - 0s 16ms/step
epoch 2082 - batch 3/3, discriminator_loss=0.000, generator_loss=1.231
1/1 [=====] - 0s 17ms/step
epoch 2083 - batch 1/3, discriminator_loss=0.025, generator_loss=1.562
1/1 [=====] - 0s 15ms/step
epoch 2083 - batch 2/3, discriminator_loss=0.027, generator_loss=2.138
1/1 [=====] - 0s 17ms/step
epoch 2083 - batch 3/3, discriminator_loss=0.436, generator_loss=4.813
1/1 [=====] - 0s 15ms/step
epoch 2084 - batch 1/3, discriminator_loss=0.028, generator_loss=6.752
1/1 [=====] - 0s 17ms/step
epoch 2084 - batch 2/3, discriminator_loss=0.005, generator_loss=1.353
1/1 [=====] - 0s 15ms/step
epoch 2084 - batch 3/3, discriminator_loss=0.010, generator_loss=4.078
1/1 [=====] - 0s 17ms/step
epoch 2085 - batch 1/3, discriminator_loss=0.039, generator_loss=5.593
1/1 [=====] - 0s 17ms/step

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epoch 2085 - batch 2/3, discriminator\_loss=0.910, generator\_loss=3.175  
 1/1 [=====] - 0s 15ms/step  
 epoch 2085 - batch 3/3, discriminator\_loss=0.460, generator\_loss=3.939  
 1/1 [=====] - 0s 18ms/step  
 epoch 2086 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.952  
 1/1 [=====] - 0s 15ms/step  
 epoch 2086 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.002  
 1/1 [=====] - 0s 15ms/step  
 epoch 2086 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.157  
 1/1 [=====] - 0s 16ms/step  
 epoch 2087 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.698  
 1/1 [=====] - 0s 15ms/step  
 epoch 2087 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.063  
 1/1 [=====] - 0s 18ms/step  
 epoch 2087 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.083  
 1/1 [=====] - 0s 15ms/step  
 epoch 2088 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.216  
 1/1 [=====] - 0s 16ms/step  
 epoch 2088 - batch 2/3, discriminator\_loss=0.658, generator\_loss=3.075  
 1/1 [=====] - 0s 16ms/step  
 epoch 2088 - batch 3/3, discriminator\_loss=0.603, generator\_loss=2.078  
 1/1 [=====] - 0s 15ms/step  
 epoch 2089 - batch 1/3, discriminator\_loss=0.212, generator\_loss=2.239  
 1/1 [=====] - 0s 18ms/step  
 epoch 2089 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.001  
 1/1 [=====] - 0s 16ms/step  
 epoch 2089 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.693  
 1/1 [=====] - 0s 15ms/step  
 epoch 2090 - batch 1/3, discriminator\_loss=0.607, generator\_loss=4.086  
 1/1 [=====] - 0s 15ms/step  
 epoch 2090 - batch 2/3, discriminator\_loss=0.000, generator\_loss=4.098  
 1/1 [=====] - 0s 20ms/step  
 epoch 2090 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.324  
 1/1 [=====] - 0s 15ms/step  
 epoch 2091 - batch 1/3, discriminator\_loss=0.035, generator\_loss=14.262  
 1/1 [=====] - 0s 15ms/step  
 epoch 2091 - batch 2/3, discriminator\_loss=0.000, generator\_loss=17.126  
 1/1 [=====] - 0s 15ms/step  
 epoch 2091 - batch 3/3, discriminator\_loss=1.192, generator\_loss=13.730  
 1/1 [=====] - 0s 15ms/step  
 epoch 2092 - batch 1/3, discriminator\_loss=0.000, generator\_loss=9.909  
 1/1 [=====] - 0s 15ms/step  
 epoch 2092 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.563  
 1/1 [=====] - 0s 15ms/step  
 epoch 2092 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.695  
 1/1 [=====] - 0s 15ms/step  
 epoch 2093 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.227  
 1/1 [=====] - 0s 16ms/step

epoch 2093 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.685  
 1/1 [=====] - 0s 19ms/step  
 epoch 2093 - batch 3/3, discriminator\_loss=0.255, generator\_loss=7.130  
 1/1 [=====] - 0s 15ms/step  
 epoch 2094 - batch 1/3, discriminator\_loss=0.028, generator\_loss=4.853  
 1/1 [=====] - 0s 15ms/step  
 epoch 2094 - batch 2/3, discriminator\_loss=0.004, generator\_loss=8.861  
 1/1 [=====] - 0s 15ms/step  
 epoch 2094 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.932  
 1/1 [=====] - 0s 20ms/step  
 epoch 2095 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.911  
 1/1 [=====] - 0s 17ms/step  
 epoch 2095 - batch 2/3, discriminator\_loss=0.000, generator\_loss=10.525  
 1/1 [=====] - 0s 15ms/step  
 epoch 2095 - batch 3/3, discriminator\_loss=0.186, generator\_loss=7.276  
 1/1 [=====] - 0s 16ms/step  
 epoch 2096 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.307  
 1/1 [=====] - 0s 16ms/step  
 epoch 2096 - batch 2/3, discriminator\_loss=0.000, generator\_loss=4.310  
 1/1 [=====] - 0s 15ms/step  
 epoch 2096 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.334  
 1/1 [=====] - 0s 15ms/step  
 epoch 2097 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.251  
 1/1 [=====] - 0s 15ms/step  
 epoch 2097 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.616  
 1/1 [=====] - 0s 23ms/step  
 epoch 2097 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.009  
 1/1 [=====] - 0s 17ms/step  
 epoch 2098 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.920  
 1/1 [=====] - 0s 16ms/step  
 epoch 2098 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.553  
 1/1 [=====] - 0s 15ms/step  
 epoch 2098 - batch 3/3, discriminator\_loss=0.044, generator\_loss=0.284  
 1/1 [=====] - 0s 19ms/step  
 epoch 2099 - batch 1/3, discriminator\_loss=0.200, generator\_loss=3.747  
 1/1 [=====] - 0s 15ms/step  
 epoch 2099 - batch 2/3, discriminator\_loss=0.012, generator\_loss=4.067  
 1/1 [=====] - 0s 17ms/step  
 epoch 2099 - batch 3/3, discriminator\_loss=0.000, generator\_loss=7.456  
 1/1 [=====] - 0s 18ms/step  
 epoch 2100 - batch 1/3, discriminator\_loss=0.000, generator\_loss=8.548  
 1/1 [=====] - 0s 15ms/step  
 epoch 2100 - batch 2/3, discriminator\_loss=0.602, generator\_loss=5.221  
 1/1 [=====] - 0s 18ms/step  
 epoch 2100 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.278  
 1/1 [=====] - 0s 15ms/step  
 epoch 2101 - batch 1/3, discriminator\_loss=0.490, generator\_loss=5.027  
 1/1 [=====] - 0s 15ms/step

epoch 2101 - batch 2/3, discriminator\_loss=0.082, generator\_loss=6.907  
1/1 [=====] - 0s 16ms/step  
epoch 2101 - batch 3/3, discriminator\_loss=0.336, generator\_loss=5.570  
4/4 [=====] - 0s 50ms/step  
Accuracy réelle : 94%, fausse : 100%  
1/1 [=====] - 0s 15ms/step  
epoch 2102 - batch 1/3, discriminator\_loss=0.387, generator\_loss=2.496  
1/1 [=====] - 0s 19ms/step  
epoch 2102 - batch 2/3, discriminator\_loss=0.191, generator\_loss=3.975  
1/1 [=====] - 0s 15ms/step  
epoch 2102 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.704  
1/1 [=====] - 0s 17ms/step  
epoch 2103 - batch 1/3, discriminator\_loss=0.014, generator\_loss=1.576  
1/1 [=====] - 0s 18ms/step  
epoch 2103 - batch 2/3, discriminator\_loss=0.009, generator\_loss=0.783  
1/1 [=====] - 0s 15ms/step  
epoch 2103 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.728  
1/1 [=====] - 0s 15ms/step  
epoch 2104 - batch 1/3, discriminator\_loss=1.626, generator\_loss=1.944  
1/1 [=====] - 0s 17ms/step  
epoch 2104 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.923  
1/1 [=====] - 0s 15ms/step  
epoch 2104 - batch 3/3, discriminator\_loss=0.000, generator\_loss=12.514  
1/1 [=====] - 0s 15ms/step  
epoch 2105 - batch 1/3, discriminator\_loss=0.000, generator\_loss=15.177  
1/1 [=====] - 0s 15ms/step  
epoch 2105 - batch 2/3, discriminator\_loss=0.000, generator\_loss=17.987  
1/1 [=====] - 0s 16ms/step  
epoch 2105 - batch 3/3, discriminator\_loss=0.187, generator\_loss=10.468  
1/1 [=====] - 0s 25ms/step  
epoch 2106 - batch 1/3, discriminator\_loss=1.318, generator\_loss=6.871  
1/1 [=====] - 0s 17ms/step  
epoch 2106 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.257  
1/1 [=====] - 0s 16ms/step  
epoch 2106 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.414  
1/1 [=====] - 0s 19ms/step  
epoch 2107 - batch 1/3, discriminator\_loss=0.225, generator\_loss=0.385  
1/1 [=====] - 0s 15ms/step  
epoch 2107 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.054  
1/1 [=====] - 0s 19ms/step  
epoch 2107 - batch 3/3, discriminator\_loss=0.164, generator\_loss=0.182  
1/1 [=====] - 0s 15ms/step  
epoch 2108 - batch 1/3, discriminator\_loss=0.181, generator\_loss=1.315  
1/1 [=====] - 0s 16ms/step  
epoch 2108 - batch 2/3, discriminator\_loss=0.135, generator\_loss=5.085  
1/1 [=====] - 0s 16ms/step  
epoch 2108 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.007  
1/1 [=====] - 0s 15ms/step

epoch 2109 - batch 1/3, discriminator\_loss=0.000, generator\_loss=12.589  
 1/1 [=====] - 0s 18ms/step  
 epoch 2109 - batch 2/3, discriminator\_loss=0.058, generator\_loss=10.288  
 1/1 [=====] - 0s 18ms/step  
 epoch 2109 - batch 3/3, discriminator\_loss=0.311, generator\_loss=5.369  
 1/1 [=====] - 0s 21ms/step  
 epoch 2110 - batch 1/3, discriminator\_loss=0.043, generator\_loss=1.204  
 1/1 [=====] - 0s 16ms/step  
 epoch 2110 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.584  
 1/1 [=====] - 0s 15ms/step  
 epoch 2110 - batch 3/3, discriminator\_loss=0.002, generator\_loss=0.821  
 1/1 [=====] - 0s 16ms/step  
 epoch 2111 - batch 1/3, discriminator\_loss=0.001, generator\_loss=0.058  
 1/1 [=====] - 0s 16ms/step  
 epoch 2111 - batch 2/3, discriminator\_loss=1.133, generator\_loss=0.071  
 1/1 [=====] - 0s 16ms/step  
 epoch 2111 - batch 3/3, discriminator\_loss=0.326, generator\_loss=2.833  
 1/1 [=====] - 0s 15ms/step  
 epoch 2112 - batch 1/3, discriminator\_loss=0.000, generator\_loss=3.081  
 1/1 [=====] - 0s 15ms/step  
 epoch 2112 - batch 2/3, discriminator\_loss=0.652, generator\_loss=2.218  
 1/1 [=====] - 0s 16ms/step  
 epoch 2112 - batch 3/3, discriminator\_loss=0.031, generator\_loss=5.739  
 1/1 [=====] - 0s 15ms/step  
 epoch 2113 - batch 1/3, discriminator\_loss=0.076, generator\_loss=4.604  
 1/1 [=====] - 0s 18ms/step  
 epoch 2113 - batch 2/3, discriminator\_loss=0.920, generator\_loss=0.620  
 1/1 [=====] - 0s 15ms/step  
 epoch 2113 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.162  
 1/1 [=====] - 0s 20ms/step  
 epoch 2114 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.008  
 1/1 [=====] - 0s 15ms/step  
 epoch 2114 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 18ms/step  
 epoch 2114 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.048  
 1/1 [=====] - 0s 15ms/step  
 epoch 2115 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 17ms/step  
 epoch 2115 - batch 2/3, discriminator\_loss=0.218, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2115 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 17ms/step  
 epoch 2116 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2116 - batch 2/3, discriminator\_loss=0.085, generator\_loss=0.117  
 1/1 [=====] - 0s 16ms/step  
 epoch 2116 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step

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epoch 2117 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2117 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2117 - batch 3/3, discriminator_loss=0.014, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2118 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2118 - batch 2/3, discriminator_loss=0.795, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2118 - batch 3/3, discriminator_loss=0.000, generator_loss=0.011
1/1 [=====] - 0s 16ms/step
epoch 2119 - batch 1/3, discriminator_loss=0.000, generator_loss=0.003
1/1 [=====] - 0s 19ms/step
epoch 2119 - batch 2/3, discriminator_loss=0.000, generator_loss=0.176
1/1 [=====] - 0s 15ms/step
epoch 2119 - batch 3/3, discriminator_loss=0.000, generator_loss=0.049
1/1 [=====] - 0s 16ms/step
epoch 2120 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2120 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2120 - batch 3/3, discriminator_loss=1.144, generator_loss=0.180
1/1 [=====] - 0s 15ms/step
epoch 2121 - batch 1/3, discriminator_loss=0.444, generator_loss=0.490
1/1 [=====] - 0s 15ms/step
epoch 2121 - batch 2/3, discriminator_loss=0.000, generator_loss=1.455
1/1 [=====] - 0s 16ms/step
epoch 2121 - batch 3/3, discriminator_loss=0.000, generator_loss=3.442
4/4 [=====] - 0s 51ms/step
Accuracy réelle : 92%, fausse : 100%
1/1 [=====] - 0s 15ms/step
epoch 2122 - batch 1/3, discriminator_loss=0.000, generator_loss=2.840
1/1 [=====] - 0s 15ms/step
epoch 2122 - batch 2/3, discriminator_loss=0.000, generator_loss=2.608
1/1 [=====] - 0s 15ms/step
epoch 2122 - batch 3/3, discriminator_loss=0.000, generator_loss=2.261
1/1 [=====] - 0s 16ms/step
epoch 2123 - batch 1/3, discriminator_loss=0.000, generator_loss=2.559
1/1 [=====] - 0s 15ms/step
epoch 2123 - batch 2/3, discriminator_loss=0.000, generator_loss=125.865
1/1 [=====] - 0s 15ms/step
epoch 2123 - batch 3/3, discriminator_loss=0.000, generator_loss=10019.338
1/1 [=====] - 0s 15ms/step
epoch 2124 - batch 1/3, discriminator_loss=0.001, generator_loss=2666.989
1/1 [=====] - 0s 16ms/step
epoch 2124 - batch 2/3, discriminator_loss=0.000, generator_loss=330.850
1/1 [=====] - 0s 15ms/step

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epoch 2124 - batch 3/3, discriminator\_loss=8.904, generator\_loss=378.541  
1/1 [=====] - 0s 15ms/step  
epoch 2125 - batch 1/3, discriminator\_loss=0.000, generator\_loss=546.246  
1/1 [=====] - 0s 17ms/step  
epoch 2125 - batch 2/3, discriminator\_loss=0.011, generator\_loss=609.940  
1/1 [=====] - 0s 16ms/step  
epoch 2125 - batch 3/3, discriminator\_loss=0.000, generator\_loss=623.369  
1/1 [=====] - 0s 16ms/step  
epoch 2126 - batch 1/3, discriminator\_loss=0.000, generator\_loss=574.511  
1/1 [=====] - 0s 15ms/step  
epoch 2126 - batch 2/3, discriminator\_loss=0.000, generator\_loss=546.827  
1/1 [=====] - 0s 15ms/step  
epoch 2126 - batch 3/3, discriminator\_loss=0.000, generator\_loss=412.901  
1/1 [=====] - 0s 16ms/step  
epoch 2127 - batch 1/3, discriminator\_loss=0.000, generator\_loss=282.025  
1/1 [=====] - 0s 15ms/step  
epoch 2127 - batch 2/3, discriminator\_loss=0.564, generator\_loss=186.020  
1/1 [=====] - 0s 18ms/step  
epoch 2127 - batch 3/3, discriminator\_loss=0.716, generator\_loss=132.333  
1/1 [=====] - 0s 17ms/step  
epoch 2128 - batch 1/3, discriminator\_loss=0.021, generator\_loss=108.233  
1/1 [=====] - 0s 15ms/step  
epoch 2128 - batch 2/3, discriminator\_loss=0.312, generator\_loss=102.147  
1/1 [=====] - 0s 15ms/step  
epoch 2128 - batch 3/3, discriminator\_loss=0.000, generator\_loss=91.709  
1/1 [=====] - 0s 15ms/step  
epoch 2129 - batch 1/3, discriminator\_loss=0.000, generator\_loss=92.188  
1/1 [=====] - 0s 15ms/step  
epoch 2129 - batch 2/3, discriminator\_loss=0.000, generator\_loss=98.323  
1/1 [=====] - 0s 15ms/step  
epoch 2129 - batch 3/3, discriminator\_loss=0.000, generator\_loss=106.353  
1/1 [=====] - 0s 15ms/step  
epoch 2130 - batch 1/3, discriminator\_loss=0.000, generator\_loss=90.972  
1/1 [=====] - 0s 18ms/step  
epoch 2130 - batch 2/3, discriminator\_loss=0.000, generator\_loss=102.115  
1/1 [=====] - 0s 19ms/step  
epoch 2130 - batch 3/3, discriminator\_loss=0.000, generator\_loss=99.098  
1/1 [=====] - 0s 17ms/step  
epoch 2131 - batch 1/3, discriminator\_loss=0.148, generator\_loss=99.152  
1/1 [=====] - 0s 16ms/step  
epoch 2131 - batch 2/3, discriminator\_loss=0.000, generator\_loss=102.454  
1/1 [=====] - 0s 15ms/step  
epoch 2131 - batch 3/3, discriminator\_loss=0.000, generator\_loss=97.916  
1/1 [=====] - 0s 18ms/step  
epoch 2132 - batch 1/3, discriminator\_loss=0.000, generator\_loss=95.005  
1/1 [=====] - 0s 15ms/step  
epoch 2132 - batch 2/3, discriminator\_loss=0.000, generator\_loss=91.907  
1/1 [=====] - 0s 16ms/step



epoch 2132 - batch 3/3, discriminator\_loss=0.000, generator\_loss=85.260  
1/1 [=====] - 0s 15ms/step  
epoch 2133 - batch 1/3, discriminator\_loss=0.000, generator\_loss=78.727  
1/1 [=====] - 0s 16ms/step  
epoch 2133 - batch 2/3, discriminator\_loss=0.000, generator\_loss=80.722  
1/1 [=====] - 0s 15ms/step  
epoch 2133 - batch 3/3, discriminator\_loss=0.000, generator\_loss=75.611  
1/1 [=====] - 0s 15ms/step  
epoch 2134 - batch 1/3, discriminator\_loss=0.000, generator\_loss=64.094  
1/1 [=====] - 0s 15ms/step  
epoch 2134 - batch 2/3, discriminator\_loss=0.000, generator\_loss=63.351  
1/1 [=====] - 0s 19ms/step  
epoch 2134 - batch 3/3, discriminator\_loss=0.000, generator\_loss=53.906  
1/1 [=====] - 0s 16ms/step  
epoch 2135 - batch 1/3, discriminator\_loss=0.000, generator\_loss=53.486  
1/1 [=====] - 0s 15ms/step  
epoch 2135 - batch 2/3, discriminator\_loss=0.000, generator\_loss=44.599  
1/1 [=====] - 0s 15ms/step  
epoch 2135 - batch 3/3, discriminator\_loss=0.000, generator\_loss=41.762  
1/1 [=====] - 0s 15ms/step  
epoch 2136 - batch 1/3, discriminator\_loss=0.000, generator\_loss=41.869  
1/1 [=====] - 0s 17ms/step  
epoch 2136 - batch 2/3, discriminator\_loss=0.000, generator\_loss=34.064  
1/1 [=====] - 0s 16ms/step  
epoch 2136 - batch 3/3, discriminator\_loss=0.000, generator\_loss=26.934  
1/1 [=====] - 0s 17ms/step  
epoch 2137 - batch 1/3, discriminator\_loss=0.000, generator\_loss=31.453  
1/1 [=====] - 0s 17ms/step  
epoch 2137 - batch 2/3, discriminator\_loss=0.000, generator\_loss=25.810  
1/1 [=====] - 0s 15ms/step  
epoch 2137 - batch 3/3, discriminator\_loss=0.365, generator\_loss=27.433  
1/1 [=====] - 0s 16ms/step  
epoch 2138 - batch 1/3, discriminator\_loss=0.000, generator\_loss=28.126  
1/1 [=====] - 0s 15ms/step  
epoch 2138 - batch 2/3, discriminator\_loss=0.000, generator\_loss=42.864  
1/1 [=====] - 0s 19ms/step  
epoch 2138 - batch 3/3, discriminator\_loss=0.000, generator\_loss=52.209  
1/1 [=====] - 0s 25ms/step  
epoch 2139 - batch 1/3, discriminator\_loss=0.000, generator\_loss=52.863  
1/1 [=====] - 0s 26ms/step  
epoch 2139 - batch 2/3, discriminator\_loss=0.000, generator\_loss=56.331  
1/1 [=====] - 0s 16ms/step  
epoch 2139 - batch 3/3, discriminator\_loss=0.000, generator\_loss=45.962  
1/1 [=====] - 0s 18ms/step  
epoch 2140 - batch 1/3, discriminator\_loss=0.000, generator\_loss=50.585  
1/1 [=====] - 0s 15ms/step  
epoch 2140 - batch 2/3, discriminator\_loss=0.000, generator\_loss=50.942  
1/1 [=====] - 0s 17ms/step

epoch 2140 - batch 3/3, discriminator\_loss=0.000, generator\_loss=40.933  
 1/1 [=====] - 0s 15ms/step  
 epoch 2141 - batch 1/3, discriminator\_loss=0.000, generator\_loss=49.353  
 1/1 [=====] - 0s 15ms/step  
 epoch 2141 - batch 2/3, discriminator\_loss=0.000, generator\_loss=27.512  
 1/1 [=====] - 0s 18ms/step  
 epoch 2141 - batch 3/3, discriminator\_loss=0.000, generator\_loss=33.907  
 4/4 [=====] - 0s 51ms/step  
 Accuracy réelle : 31%, fausse : 100%  
 1/1 [=====] - 0s 17ms/step  
 epoch 2142 - batch 1/3, discriminator\_loss=0.000, generator\_loss=37.512  
 1/1 [=====] - 0s 15ms/step  
 epoch 2142 - batch 2/3, discriminator\_loss=0.000, generator\_loss=35.798  
 1/1 [=====] - 0s 15ms/step  
 epoch 2142 - batch 3/3, discriminator\_loss=0.000, generator\_loss=28.687  
 1/1 [=====] - 0s 17ms/step  
 epoch 2143 - batch 1/3, discriminator\_loss=0.000, generator\_loss=28.099  
 1/1 [=====] - 0s 15ms/step  
 epoch 2143 - batch 2/3, discriminator\_loss=0.000, generator\_loss=26.297  
 1/1 [=====] - 0s 15ms/step  
 epoch 2143 - batch 3/3, discriminator\_loss=0.000, generator\_loss=21.256  
 1/1 [=====] - 0s 15ms/step  
 epoch 2144 - batch 1/3, discriminator\_loss=0.000, generator\_loss=24.261  
 1/1 [=====] - 0s 16ms/step  
 epoch 2144 - batch 2/3, discriminator\_loss=0.000, generator\_loss=22.049  
 1/1 [=====] - 0s 17ms/step  
 epoch 2144 - batch 3/3, discriminator\_loss=0.000, generator\_loss=19.065  
 1/1 [=====] - 0s 15ms/step  
 epoch 2145 - batch 1/3, discriminator\_loss=0.000, generator\_loss=20.316  
 1/1 [=====] - 0s 16ms/step  
 epoch 2145 - batch 2/3, discriminator\_loss=0.000, generator\_loss=15.382  
 1/1 [=====] - 0s 17ms/step  
 epoch 2145 - batch 3/3, discriminator\_loss=0.391, generator\_loss=15.276  
 1/1 [=====] - 0s 15ms/step  
 epoch 2146 - batch 1/3, discriminator\_loss=0.000, generator\_loss=20.580  
 1/1 [=====] - 0s 16ms/step  
 epoch 2146 - batch 2/3, discriminator\_loss=0.000, generator\_loss=4.579  
 1/1 [=====] - 0s 15ms/step  
 epoch 2146 - batch 3/3, discriminator\_loss=0.000, generator\_loss=11.681  
 1/1 [=====] - 0s 17ms/step  
 epoch 2147 - batch 1/3, discriminator\_loss=0.285, generator\_loss=9.433  
 1/1 [=====] - 0s 16ms/step  
 epoch 2147 - batch 2/3, discriminator\_loss=0.000, generator\_loss=12.906  
 1/1 [=====] - 0s 16ms/step  
 epoch 2147 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.928  
 1/1 [=====] - 0s 16ms/step  
 epoch 2148 - batch 1/3, discriminator\_loss=0.000, generator\_loss=19.387  
 1/1 [=====] - 0s 15ms/step

epoch 2148 - batch 2/3, discriminator\_loss=0.000, generator\_loss=23.444  
1/1 [=====] - 0s 16ms/step  
epoch 2148 - batch 3/3, discriminator\_loss=1.173, generator\_loss=4.919  
1/1 [=====] - 0s 23ms/step  
epoch 2149 - batch 1/3, discriminator\_loss=0.000, generator\_loss=4.000  
1/1 [=====] - 0s 15ms/step  
epoch 2149 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.505  
1/1 [=====] - 0s 18ms/step  
epoch 2149 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.836  
1/1 [=====] - 0s 19ms/step  
epoch 2150 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.060  
1/1 [=====] - 0s 18ms/step  
epoch 2150 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.933  
1/1 [=====] - 0s 15ms/step  
epoch 2150 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.821  
1/1 [=====] - 0s 17ms/step  
epoch 2151 - batch 1/3, discriminator\_loss=1.252, generator\_loss=0.858  
1/1 [=====] - 0s 16ms/step  
epoch 2151 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.703  
1/1 [=====] - 0s 17ms/step  
epoch 2151 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.457  
1/1 [=====] - 0s 15ms/step  
epoch 2152 - batch 1/3, discriminator\_loss=0.000, generator\_loss=12.371  
1/1 [=====] - 0s 17ms/step  
epoch 2152 - batch 2/3, discriminator\_loss=0.000, generator\_loss=10.107  
1/1 [=====] - 0s 17ms/step  
epoch 2152 - batch 3/3, discriminator\_loss=0.000, generator\_loss=9.285  
1/1 [=====] - 0s 18ms/step  
epoch 2153 - batch 1/3, discriminator\_loss=0.000, generator\_loss=12.554  
1/1 [=====] - 0s 15ms/step  
epoch 2153 - batch 2/3, discriminator\_loss=0.000, generator\_loss=13.380  
1/1 [=====] - 0s 15ms/step  
epoch 2153 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.850  
1/1 [=====] - 0s 18ms/step  
epoch 2154 - batch 1/3, discriminator\_loss=0.006, generator\_loss=12.510  
1/1 [=====] - 0s 18ms/step  
epoch 2154 - batch 2/3, discriminator\_loss=0.000, generator\_loss=13.294  
1/1 [=====] - 0s 15ms/step  
epoch 2154 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.888  
1/1 [=====] - 0s 15ms/step  
epoch 2155 - batch 1/3, discriminator\_loss=0.000, generator\_loss=3.492  
1/1 [=====] - 0s 15ms/step  
epoch 2155 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.868  
1/1 [=====] - 0s 15ms/step  
epoch 2155 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.061  
1/1 [=====] - 0s 16ms/step  
epoch 2156 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.335  
1/1 [=====] - 0s 16ms/step

epoch 2156 - batch 2/3, discriminator\_loss=0.000, generator\_loss=4.237  
 1/1 [=====] - 0s 16ms/step  
 epoch 2156 - batch 3/3, discriminator\_loss=0.014, generator\_loss=3.621  
 1/1 [=====] - 0s 15ms/step  
 epoch 2157 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.231  
 1/1 [=====] - 0s 15ms/step  
 epoch 2157 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.389  
 1/1 [=====] - 0s 16ms/step  
 epoch 2157 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.147  
 1/1 [=====] - 0s 15ms/step  
 epoch 2158 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.812  
 1/1 [=====] - 0s 15ms/step  
 epoch 2158 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.780  
 1/1 [=====] - 0s 18ms/step  
 epoch 2158 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.623  
 1/1 [=====] - 0s 16ms/step  
 epoch 2159 - batch 1/3, discriminator\_loss=2.692, generator\_loss=0.051  
 1/1 [=====] - 0s 16ms/step  
 epoch 2159 - batch 2/3, discriminator\_loss=0.520, generator\_loss=0.195  
 1/1 [=====] - 0s 16ms/step  
 epoch 2159 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step  
 epoch 2160 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.689  
 1/1 [=====] - 0s 17ms/step  
 epoch 2160 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2160 - batch 3/3, discriminator\_loss=0.014, generator\_loss=0.009  
 1/1 [=====] - 0s 19ms/step  
 epoch 2161 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 19ms/step  
 epoch 2161 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2161 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
 4/4 [=====] - 0s 51ms/step  
 Accuracy réelle : 92%, fausse : 84%  
 1/1 [=====] - 0s 20ms/step  
 epoch 2162 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.414  
 1/1 [=====] - 0s 20ms/step  
 epoch 2162 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2162 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 17ms/step  
 epoch 2163 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2163 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2163 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.067  
 1/1 [=====] - 0s 15ms/step

epoch 2164 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.053  
1/1 [=====] - 0s 15ms/step  
epoch 2164 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2164 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.211  
1/1 [=====] - 0s 17ms/step  
epoch 2165 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.411  
1/1 [=====] - 0s 16ms/step  
epoch 2165 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.247  
1/1 [=====] - 0s 19ms/step  
epoch 2165 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.202  
1/1 [=====] - 0s 26ms/step  
epoch 2166 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.476  
1/1 [=====] - 0s 16ms/step  
epoch 2166 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.003  
1/1 [=====] - 0s 15ms/step  
epoch 2166 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 20ms/step  
epoch 2167 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2167 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.455  
1/1 [=====] - 0s 15ms/step  
epoch 2167 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.672  
1/1 [=====] - 0s 18ms/step  
epoch 2168 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.809  
1/1 [=====] - 0s 15ms/step  
epoch 2168 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.643  
1/1 [=====] - 0s 15ms/step  
epoch 2168 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.671  
1/1 [=====] - 0s 15ms/step  
epoch 2169 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.617  
1/1 [=====] - 0s 18ms/step  
epoch 2169 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.918  
1/1 [=====] - 0s 15ms/step  
epoch 2169 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.468  
1/1 [=====] - 0s 17ms/step  
epoch 2170 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.735  
1/1 [=====] - 0s 16ms/step  
epoch 2170 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.739  
1/1 [=====] - 0s 15ms/step  
epoch 2170 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.748  
1/1 [=====] - 0s 18ms/step  
epoch 2171 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.326  
1/1 [=====] - 0s 16ms/step  
epoch 2171 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.719  
1/1 [=====] - 0s 15ms/step  
epoch 2171 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.169  
1/1 [=====] - 0s 15ms/step

epoch 2172 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.021  
1/1 [=====] - 0s 18ms/step  
epoch 2172 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.152  
1/1 [=====] - 0s 18ms/step  
epoch 2172 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.436  
1/1 [=====] - 0s 16ms/step  
epoch 2173 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.861  
1/1 [=====] - 0s 15ms/step  
epoch 2173 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.274  
1/1 [=====] - 0s 18ms/step  
epoch 2173 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.209  
1/1 [=====] - 0s 16ms/step  
epoch 2174 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.606  
1/1 [=====] - 0s 15ms/step  
epoch 2174 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.595  
1/1 [=====] - 0s 17ms/step  
epoch 2174 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.376  
1/1 [=====] - 0s 18ms/step  
epoch 2175 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.438  
1/1 [=====] - 0s 19ms/step  
epoch 2175 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.773  
1/1 [=====] - 0s 15ms/step  
epoch 2175 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.896  
1/1 [=====] - 0s 15ms/step  
epoch 2176 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.460  
1/1 [=====] - 0s 18ms/step  
epoch 2176 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.465  
1/1 [=====] - 0s 17ms/step  
epoch 2176 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.759  
1/1 [=====] - 0s 15ms/step  
epoch 2177 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.003  
1/1 [=====] - 0s 15ms/step  
epoch 2177 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.217  
1/1 [=====] - 0s 17ms/step  
epoch 2177 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.408  
1/1 [=====] - 0s 17ms/step  
epoch 2178 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.936  
1/1 [=====] - 0s 17ms/step  
epoch 2178 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.470  
1/1 [=====] - 0s 16ms/step  
epoch 2178 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.012  
1/1 [=====] - 0s 17ms/step  
epoch 2179 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.429  
1/1 [=====] - 0s 16ms/step  
epoch 2179 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.787  
1/1 [=====] - 0s 17ms/step  
epoch 2179 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.357  
1/1 [=====] - 0s 17ms/step

epoch 2180 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.411  
 1/1 [=====] - 0s 16ms/step  
 epoch 2180 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.828  
 1/1 [=====] - 0s 17ms/step  
 epoch 2180 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.232  
 1/1 [=====] - 0s 16ms/step  
 epoch 2181 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.266  
 1/1 [=====] - 0s 15ms/step  
 epoch 2181 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.286  
 1/1 [=====] - 0s 16ms/step  
 epoch 2181 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.469  
 4/4 [=====] - 0s 50ms/step  
 Accuracy réelle : 100%, fausse : 80%  
 1/1 [=====] - 0s 15ms/step  
 epoch 2182 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.775  
 1/1 [=====] - 0s 15ms/step  
 epoch 2182 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.354  
 1/1 [=====] - 0s 15ms/step  
 epoch 2182 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.898  
 1/1 [=====] - 0s 15ms/step  
 epoch 2183 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.355  
 1/1 [=====] - 0s 18ms/step  
 epoch 2183 - batch 2/3, discriminator\_loss=0.586, generator\_loss=3.522  
 1/1 [=====] - 0s 21ms/step  
 epoch 2183 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.218  
 1/1 [=====] - 0s 15ms/step  
 epoch 2184 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.084  
 1/1 [=====] - 0s 17ms/step  
 epoch 2184 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.865  
 1/1 [=====] - 0s 16ms/step  
 epoch 2184 - batch 3/3, discriminator\_loss=0.000, generator\_loss=9.273  
 1/1 [=====] - 0s 15ms/step  
 epoch 2185 - batch 1/3, discriminator\_loss=0.000, generator\_loss=10.282  
 1/1 [=====] - 0s 15ms/step  
 epoch 2185 - batch 2/3, discriminator\_loss=0.251, generator\_loss=5.813  
 1/1 [=====] - 0s 15ms/step  
 epoch 2185 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.759  
 1/1 [=====] - 0s 19ms/step  
 epoch 2186 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.781  
 1/1 [=====] - 0s 15ms/step  
 epoch 2186 - batch 2/3, discriminator\_loss=0.000, generator\_loss=7.439  
 1/1 [=====] - 0s 16ms/step  
 epoch 2186 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.651  
 1/1 [=====] - 0s 15ms/step  
 epoch 2187 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.220  
 1/1 [=====] - 0s 16ms/step  
 epoch 2187 - batch 2/3, discriminator\_loss=0.000, generator\_loss=7.682  
 1/1 [=====] - 0s 18ms/step

epoch 2187 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.309  
 1/1 [=====] - 0s 16ms/step  
 epoch 2188 - batch 1/3, discriminator\_loss=0.001, generator\_loss=6.939  
 1/1 [=====] - 0s 15ms/step  
 epoch 2188 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.342  
 1/1 [=====] - 0s 15ms/step  
 epoch 2188 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.999  
 1/1 [=====] - 0s 15ms/step  
 epoch 2189 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.790  
 1/1 [=====] - 0s 16ms/step  
 epoch 2189 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.045  
 1/1 [=====] - 0s 16ms/step  
 epoch 2189 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.304  
 1/1 [=====] - 0s 17ms/step  
 epoch 2190 - batch 1/3, discriminator\_loss=0.000, generator\_loss=4.199  
 1/1 [=====] - 0s 23ms/step  
 epoch 2190 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.391  
 1/1 [=====] - 0s 15ms/step  
 epoch 2190 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.720  
 1/1 [=====] - 0s 16ms/step  
 epoch 2191 - batch 1/3, discriminator\_loss=0.000, generator\_loss=4.312  
 1/1 [=====] - 0s 15ms/step  
 epoch 2191 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.981  
 1/1 [=====] - 0s 15ms/step  
 epoch 2191 - batch 3/3, discriminator\_loss=0.004, generator\_loss=3.276  
 1/1 [=====] - 0s 15ms/step  
 epoch 2192 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.754  
 1/1 [=====] - 0s 16ms/step  
 epoch 2192 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.779  
 1/1 [=====] - 0s 15ms/step  
 epoch 2192 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.660  
 1/1 [=====] - 0s 15ms/step  
 epoch 2193 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.622  
 1/1 [=====] - 0s 18ms/step  
 epoch 2193 - batch 2/3, discriminator\_loss=0.000, generator\_loss=10.646  
 1/1 [=====] - 0s 17ms/step  
 epoch 2193 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.373  
 1/1 [=====] - 0s 15ms/step  
 epoch 2194 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.803  
 1/1 [=====] - 0s 18ms/step  
 epoch 2194 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.513  
 1/1 [=====] - 0s 20ms/step  
 epoch 2194 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.841  
 1/1 [=====] - 0s 19ms/step  
 epoch 2195 - batch 1/3, discriminator\_loss=0.126, generator\_loss=11.937  
 1/1 [=====] - 0s 17ms/step  
 epoch 2195 - batch 2/3, discriminator\_loss=0.000, generator\_loss=24.027  
 1/1 [=====] - 0s 16ms/step



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epoch 2195 - batch 3/3, discriminator_loss=0.000, generator_loss=37.283
1/1 [=====] - 0s 16ms/step
epoch 2196 - batch 1/3, discriminator_loss=0.000, generator_loss=46.810
1/1 [=====] - 0s 15ms/step
epoch 2196 - batch 2/3, discriminator_loss=0.000, generator_loss=51.422
1/1 [=====] - 0s 15ms/step
epoch 2196 - batch 3/3, discriminator_loss=0.000, generator_loss=56.981
1/1 [=====] - 0s 15ms/step
epoch 2197 - batch 1/3, discriminator_loss=0.000, generator_loss=63.625
1/1 [=====] - 0s 26ms/step
epoch 2197 - batch 2/3, discriminator_loss=0.000, generator_loss=71.236
1/1 [=====] - 0s 15ms/step
epoch 2197 - batch 3/3, discriminator_loss=0.230, generator_loss=61.964
1/1 [=====] - 0s 15ms/step
epoch 2198 - batch 1/3, discriminator_loss=0.000, generator_loss=61.335
1/1 [=====] - 0s 15ms/step
epoch 2198 - batch 2/3, discriminator_loss=0.000, generator_loss=55.357
1/1 [=====] - 0s 16ms/step
epoch 2198 - batch 3/3, discriminator_loss=0.000, generator_loss=49.651
1/1 [=====] - 0s 15ms/step
epoch 2199 - batch 1/3, discriminator_loss=0.000, generator_loss=45.790
1/1 [=====] - 0s 17ms/step
epoch 2199 - batch 2/3, discriminator_loss=0.000, generator_loss=44.980
1/1 [=====] - 0s 15ms/step
epoch 2199 - batch 3/3, discriminator_loss=0.000, generator_loss=44.744
1/1 [=====] - 0s 16ms/step
epoch 2200 - batch 1/3, discriminator_loss=0.000, generator_loss=41.078
1/1 [=====] - 0s 18ms/step
epoch 2200 - batch 2/3, discriminator_loss=0.000, generator_loss=32.450
1/1 [=====] - 0s 17ms/step
epoch 2200 - batch 3/3, discriminator_loss=0.000, generator_loss=33.236
1/1 [=====] - 0s 16ms/step
epoch 2201 - batch 1/3, discriminator_loss=0.001, generator_loss=22.922
1/1 [=====] - 0s 17ms/step
epoch 2201 - batch 2/3, discriminator_loss=0.000, generator_loss=19.501
1/1 [=====] - 0s 18ms/step
epoch 2201 - batch 3/3, discriminator_loss=0.129, generator_loss=28.292
4/4 [=====] - 0s 50ms/step
Accuracy réelle : 92%, fausse : 100%
1/1 [=====] - 0s 16ms/step
epoch 2202 - batch 1/3, discriminator_loss=0.000, generator_loss=20.566
1/1 [=====] - 0s 15ms/step
epoch 2202 - batch 2/3, discriminator_loss=0.000, generator_loss=18.269
1/1 [=====] - 0s 17ms/step
epoch 2202 - batch 3/3, discriminator_loss=0.000, generator_loss=16.628
1/1 [=====] - 0s 15ms/step
epoch 2203 - batch 1/3, discriminator_loss=0.000, generator_loss=15.432
1/1 [=====] - 0s 15ms/step

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epoch 2203 - batch 2/3, discriminator\_loss=0.002, generator\_loss=17.240  
1/1 [=====] - 0s 15ms/step  
epoch 2203 - batch 3/3, discriminator\_loss=0.600, generator\_loss=80.459  
1/1 [=====] - 0s 15ms/step  
epoch 2204 - batch 1/3, discriminator\_loss=0.000, generator\_loss=118.031  
1/1 [=====] - 0s 21ms/step  
epoch 2204 - batch 2/3, discriminator\_loss=0.000, generator\_loss=141.386  
1/1 [=====] - 0s 15ms/step  
epoch 2204 - batch 3/3, discriminator\_loss=0.000, generator\_loss=148.117  
1/1 [=====] - 0s 21ms/step  
epoch 2205 - batch 1/3, discriminator\_loss=0.008, generator\_loss=152.398  
1/1 [=====] - 0s 19ms/step  
epoch 2205 - batch 2/3, discriminator\_loss=0.000, generator\_loss=152.343  
1/1 [=====] - 0s 15ms/step  
epoch 2205 - batch 3/3, discriminator\_loss=0.000, generator\_loss=145.536  
1/1 [=====] - 0s 17ms/step  
epoch 2206 - batch 1/3, discriminator\_loss=0.007, generator\_loss=142.705  
1/1 [=====] - 0s 18ms/step  
epoch 2206 - batch 2/3, discriminator\_loss=0.000, generator\_loss=148.508  
1/1 [=====] - 0s 15ms/step  
epoch 2206 - batch 3/3, discriminator\_loss=0.269, generator\_loss=134.117  
1/1 [=====] - 0s 17ms/step  
epoch 2207 - batch 1/3, discriminator\_loss=0.000, generator\_loss=143.035  
1/1 [=====] - 0s 15ms/step  
epoch 2207 - batch 2/3, discriminator\_loss=0.000, generator\_loss=134.586  
1/1 [=====] - 0s 16ms/step  
epoch 2207 - batch 3/3, discriminator\_loss=0.000, generator\_loss=124.002  
1/1 [=====] - 0s 16ms/step  
epoch 2208 - batch 1/3, discriminator\_loss=0.000, generator\_loss=124.126  
1/1 [=====] - 0s 15ms/step  
epoch 2208 - batch 2/3, discriminator\_loss=0.000, generator\_loss=116.795  
1/1 [=====] - 0s 16ms/step  
epoch 2208 - batch 3/3, discriminator\_loss=0.000, generator\_loss=105.023  
1/1 [=====] - 0s 15ms/step  
epoch 2209 - batch 1/3, discriminator\_loss=0.000, generator\_loss=108.222  
1/1 [=====] - 0s 15ms/step  
epoch 2209 - batch 2/3, discriminator\_loss=0.000, generator\_loss=94.489  
1/1 [=====] - 0s 16ms/step  
epoch 2209 - batch 3/3, discriminator\_loss=0.000, generator\_loss=92.852  
1/1 [=====] - 0s 16ms/step  
epoch 2210 - batch 1/3, discriminator\_loss=0.000, generator\_loss=82.690  
1/1 [=====] - 0s 18ms/step  
epoch 2210 - batch 2/3, discriminator\_loss=0.000, generator\_loss=80.436  
1/1 [=====] - 0s 15ms/step  
epoch 2210 - batch 3/3, discriminator\_loss=0.000, generator\_loss=71.032  
1/1 [=====] - 0s 18ms/step  
epoch 2211 - batch 1/3, discriminator\_loss=0.000, generator\_loss=72.348  
1/1 [=====] - 0s 16ms/step

epoch 2211 - batch 2/3, discriminator\_loss=0.000, generator\_loss=62.602  
 1/1 [=====] - 0s 15ms/step  
 epoch 2211 - batch 3/3, discriminator\_loss=0.000, generator\_loss=56.303  
 1/1 [=====] - 0s 15ms/step  
 epoch 2212 - batch 1/3, discriminator\_loss=0.000, generator\_loss=42.828  
 1/1 [=====] - 0s 17ms/step  
 epoch 2212 - batch 2/3, discriminator\_loss=1.124, generator\_loss=45.823  
 1/1 [=====] - 0s 16ms/step  
 epoch 2212 - batch 3/3, discriminator\_loss=0.000, generator\_loss=41.674  
 1/1 [=====] - 0s 18ms/step  
 epoch 2213 - batch 1/3, discriminator\_loss=0.148, generator\_loss=42.967  
 1/1 [=====] - 0s 18ms/step  
 epoch 2213 - batch 2/3, discriminator\_loss=0.000, generator\_loss=51.775  
 1/1 [=====] - 0s 16ms/step  
 epoch 2213 - batch 3/3, discriminator\_loss=0.427, generator\_loss=41.457  
 1/1 [=====] - 0s 20ms/step  
 epoch 2214 - batch 1/3, discriminator\_loss=0.514, generator\_loss=34.979  
 1/1 [=====] - 0s 15ms/step  
 epoch 2214 - batch 2/3, discriminator\_loss=1.140, generator\_loss=31.434  
 1/1 [=====] - 0s 15ms/step  
 epoch 2214 - batch 3/3, discriminator\_loss=0.447, generator\_loss=16.857  
 1/1 [=====] - 0s 17ms/step  
 epoch 2215 - batch 1/3, discriminator\_loss=0.000, generator\_loss=16.438  
 1/1 [=====] - 0s 15ms/step  
 epoch 2215 - batch 2/3, discriminator\_loss=0.021, generator\_loss=11.281  
 1/1 [=====] - 0s 16ms/step  
 epoch 2215 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.931  
 1/1 [=====] - 0s 22ms/step  
 epoch 2216 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.130  
 1/1 [=====] - 0s 18ms/step  
 epoch 2216 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.436  
 1/1 [=====] - 0s 16ms/step  
 epoch 2216 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.671  
 1/1 [=====] - 0s 16ms/step  
 epoch 2217 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.939  
 1/1 [=====] - 0s 15ms/step  
 epoch 2217 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2217 - batch 3/3, discriminator\_loss=0.501, generator\_loss=0.011  
 1/1 [=====] - 0s 15ms/step  
 epoch 2218 - batch 1/3, discriminator\_loss=0.613, generator\_loss=0.752  
 1/1 [=====] - 0s 16ms/step  
 epoch 2218 - batch 2/3, discriminator\_loss=2.279, generator\_loss=0.341  
 1/1 [=====] - 0s 15ms/step  
 epoch 2218 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.556  
 1/1 [=====] - 0s 16ms/step  
 epoch 2219 - batch 1/3, discriminator\_loss=0.010, generator\_loss=9.252  
 1/1 [=====] - 0s 15ms/step

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epoch 2219 - batch 2/3, discriminator_loss=0.000, generator_loss=9.685
1/1 [=====] - 0s 20ms/step
epoch 2219 - batch 3/3, discriminator_loss=0.000, generator_loss=18.000
1/1 [=====] - 0s 16ms/step
epoch 2220 - batch 1/3, discriminator_loss=0.064, generator_loss=25.561
1/1 [=====] - 0s 15ms/step
epoch 2220 - batch 2/3, discriminator_loss=0.000, generator_loss=25.229
1/1 [=====] - 0s 19ms/step
epoch 2220 - batch 3/3, discriminator_loss=0.000, generator_loss=29.023
1/1 [=====] - 0s 16ms/step
epoch 2221 - batch 1/3, discriminator_loss=0.000, generator_loss=30.716
1/1 [=====] - 0s 16ms/step
epoch 2221 - batch 2/3, discriminator_loss=0.087, generator_loss=29.561
1/1 [=====] - 0s 16ms/step
epoch 2221 - batch 3/3, discriminator_loss=0.642, generator_loss=12.313
4/4 [=====] - 0s 52ms/step
Accuracy réelle : 100%, fausse : 99%
1/1 [=====] - 0s 23ms/step
epoch 2222 - batch 1/3, discriminator_loss=0.000, generator_loss=1.267
1/1 [=====] - 0s 15ms/step
epoch 2222 - batch 2/3, discriminator_loss=0.000, generator_loss=0.547
1/1 [=====] - 0s 17ms/step
epoch 2222 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2223 - batch 1/3, discriminator_loss=0.654, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2223 - batch 2/3, discriminator_loss=0.171, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2223 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2224 - batch 1/3, discriminator_loss=0.030, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2224 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2224 - batch 3/3, discriminator_loss=0.119, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2225 - batch 1/3, discriminator_loss=0.569, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2225 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2225 - batch 3/3, discriminator_loss=0.079, generator_loss=0.070
1/1 [=====] - 0s 18ms/step
epoch 2226 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2226 - batch 2/3, discriminator_loss=0.000, generator_loss=0.579
1/1 [=====] - 0s 15ms/step
epoch 2226 - batch 3/3, discriminator_loss=0.000, generator_loss=2.432
1/1 [=====] - 0s 16ms/step

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epoch 2227 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.921  
1/1 [=====] - 0s 18ms/step  
epoch 2227 - batch 2/3, discriminator\_loss=0.000, generator\_loss=17.906  
1/1 [=====] - 0s 16ms/step  
epoch 2227 - batch 3/3, discriminator\_loss=0.000, generator\_loss=14.319  
1/1 [=====] - 0s 16ms/step  
epoch 2228 - batch 1/3, discriminator\_loss=0.763, generator\_loss=7.158  
1/1 [=====] - 0s 16ms/step  
epoch 2228 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.239  
1/1 [=====] - 0s 18ms/step  
epoch 2228 - batch 3/3, discriminator\_loss=0.003, generator\_loss=4.233  
1/1 [=====] - 0s 16ms/step  
epoch 2229 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.750  
1/1 [=====] - 0s 17ms/step  
epoch 2229 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.535  
1/1 [=====] - 0s 15ms/step  
epoch 2229 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.173  
1/1 [=====] - 0s 15ms/step  
epoch 2230 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.275  
1/1 [=====] - 0s 15ms/step  
epoch 2230 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.007  
1/1 [=====] - 0s 16ms/step  
epoch 2230 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.577  
1/1 [=====] - 0s 15ms/step  
epoch 2231 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.098  
1/1 [=====] - 0s 16ms/step  
epoch 2231 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 19ms/step  
epoch 2231 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2232 - batch 1/3, discriminator\_loss=0.404, generator\_loss=0.189  
1/1 [=====] - 0s 16ms/step  
epoch 2232 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.005  
1/1 [=====] - 0s 20ms/step  
epoch 2232 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.253  
1/1 [=====] - 0s 17ms/step  
epoch 2233 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.943  
1/1 [=====] - 0s 15ms/step  
epoch 2233 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.456  
1/1 [=====] - 0s 18ms/step  
epoch 2233 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.332  
1/1 [=====] - 0s 17ms/step  
epoch 2234 - batch 1/3, discriminator\_loss=0.274, generator\_loss=1.742  
1/1 [=====] - 0s 17ms/step  
epoch 2234 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.360  
1/1 [=====] - 0s 18ms/step  
epoch 2234 - batch 3/3, discriminator\_loss=0.011, generator\_loss=0.001  
1/1 [=====] - 0s 15ms/step

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epoch 2235 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2235 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2235 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2236 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2236 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2236 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2237 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2237 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2237 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2238 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2238 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2238 - batch 3/3, discriminator_loss=0.485, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2239 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2239 - batch 2/3, discriminator_loss=0.000, generator_loss=0.227
1/1 [=====] - 0s 15ms/step
epoch 2239 - batch 3/3, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 18ms/step
epoch 2240 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2240 - batch 2/3, discriminator_loss=0.000, generator_loss=0.004
1/1 [=====] - 0s 16ms/step
epoch 2240 - batch 3/3, discriminator_loss=0.000, generator_loss=0.410
1/1 [=====] - 0s 18ms/step
epoch 2241 - batch 1/3, discriminator_loss=0.000, generator_loss=0.260
1/1 [=====] - 0s 18ms/step
epoch 2241 - batch 2/3, discriminator_loss=0.000, generator_loss=0.793
1/1 [=====] - 0s 18ms/step
epoch 2241 - batch 3/3, discriminator_loss=0.000, generator_loss=4.006
4/4 [=====] - 0s 50ms/step
Accuracy réelle : 100%, fausse : 56%
1/1 [=====] - 0s 15ms/step
epoch 2242 - batch 1/3, discriminator_loss=0.000, generator_loss=0.798
1/1 [=====] - 0s 16ms/step
epoch 2242 - batch 2/3, discriminator_loss=0.000, generator_loss=1.323
1/1 [=====] - 0s 17ms/step

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epoch 2242 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.259  
1/1 [=====] - 0s 15ms/step  
epoch 2243 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.587  
1/1 [=====] - 0s 15ms/step  
epoch 2243 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.265  
1/1 [=====] - 0s 15ms/step  
epoch 2243 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.858  
1/1 [=====] - 0s 17ms/step  
epoch 2244 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.245  
1/1 [=====] - 0s 15ms/step  
epoch 2244 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.356  
1/1 [=====] - 0s 15ms/step  
epoch 2244 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.219  
1/1 [=====] - 0s 18ms/step  
epoch 2245 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.682  
1/1 [=====] - 0s 16ms/step  
epoch 2245 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.190  
1/1 [=====] - 0s 17ms/step  
epoch 2245 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.040  
1/1 [=====] - 0s 15ms/step  
epoch 2246 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.234  
1/1 [=====] - 0s 15ms/step  
epoch 2246 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.001  
1/1 [=====] - 0s 22ms/step  
epoch 2246 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.093  
1/1 [=====] - 0s 17ms/step  
epoch 2247 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.011  
1/1 [=====] - 0s 16ms/step  
epoch 2247 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.023  
1/1 [=====] - 0s 15ms/step  
epoch 2247 - batch 3/3, discriminator\_loss=0.271, generator\_loss=0.001  
1/1 [=====] - 0s 15ms/step  
epoch 2248 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.018  
1/1 [=====] - 0s 15ms/step  
epoch 2248 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.327  
1/1 [=====] - 0s 16ms/step  
epoch 2248 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.150  
1/1 [=====] - 0s 17ms/step  
epoch 2249 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.400  
1/1 [=====] - 0s 17ms/step  
epoch 2249 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.034  
1/1 [=====] - 0s 20ms/step  
epoch 2249 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.390  
1/1 [=====] - 0s 15ms/step  
epoch 2250 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.361  
1/1 [=====] - 0s 18ms/step  
epoch 2250 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.361  
1/1 [=====] - 0s 18ms/step

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epoch 2250 - batch 3/3, discriminator_loss=0.000, generator_loss=0.043
1/1 [=====] - 0s 20ms/step
epoch 2251 - batch 1/3, discriminator_loss=0.000, generator_loss=0.861
1/1 [=====] - 0s 15ms/step
epoch 2251 - batch 2/3, discriminator_loss=0.000, generator_loss=1.548
1/1 [=====] - 0s 16ms/step
epoch 2251 - batch 3/3, discriminator_loss=0.000, generator_loss=0.995
4/4 [=====] - 0s 50ms/step
Accuracy réelle : 100%, fausse : 76%
1/1 [=====] - 0s 24ms/step
epoch 2252 - batch 1/3, discriminator_loss=0.000, generator_loss=2.056
1/1 [=====] - 0s 15ms/step
epoch 2252 - batch 2/3, discriminator_loss=0.000, generator_loss=2.087
1/1 [=====] - 0s 15ms/step
epoch 2252 - batch 3/3, discriminator_loss=0.229, generator_loss=0.288
1/1 [=====] - 0s 18ms/step
epoch 2253 - batch 1/3, discriminator_loss=0.000, generator_loss=0.250
1/1 [=====] - 0s 18ms/step
epoch 2253 - batch 2/3, discriminator_loss=0.000, generator_loss=3.778
1/1 [=====] - 0s 19ms/step
epoch 2253 - batch 3/3, discriminator_loss=0.000, generator_loss=3.949
1/1 [=====] - 0s 18ms/step
epoch 2254 - batch 1/3, discriminator_loss=0.000, generator_loss=5.334
1/1 [=====] - 0s 15ms/step
epoch 2254 - batch 2/3, discriminator_loss=0.000, generator_loss=4.676
1/1 [=====] - 0s 16ms/step
epoch 2254 - batch 3/3, discriminator_loss=0.000, generator_loss=6.751
1/1 [=====] - 0s 16ms/step
epoch 2255 - batch 1/3, discriminator_loss=0.000, generator_loss=5.096
1/1 [=====] - 0s 18ms/step
epoch 2255 - batch 2/3, discriminator_loss=0.659, generator_loss=0.827
1/1 [=====] - 0s 15ms/step
epoch 2255 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2256 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2256 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2256 - batch 3/3, discriminator_loss=0.190, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2257 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2257 - batch 2/3, discriminator_loss=0.815, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2257 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2258 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step

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epoch 2258 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2258 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2259 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2259 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2259 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 27ms/step
epoch 2260 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2260 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2260 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2261 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2261 - batch 2/3, discriminator_loss=0.000, generator_loss=0.031
1/1 [=====] - 0s 16ms/step
epoch 2261 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
4/4 [=====] - 0s 50ms/step
Accuracy réelle : 100%, fausse : 15%
1/1 [=====] - 0s 18ms/step
epoch 2262 - batch 1/3, discriminator_loss=0.000, generator_loss=0.321
1/1 [=====] - 0s 15ms/step
epoch 2262 - batch 2/3, discriminator_loss=0.670, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2262 - batch 3/3, discriminator_loss=0.000, generator_loss=0.048
1/1 [=====] - 0s 15ms/step
epoch 2263 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2263 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2263 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2264 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2264 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2264 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2265 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2265 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2265 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step

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epoch 2266 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 17ms/step  
epoch 2266 - batch 2/3, discriminator\_loss=0.005, generator\_loss=0.013  
1/1 [=====] - 0s 17ms/step  
epoch 2266 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 22ms/step  
epoch 2267 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2267 - batch 2/3, discriminator\_loss=0.001, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2267 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.170  
1/1 [=====] - 0s 16ms/step  
epoch 2268 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 20ms/step  
epoch 2268 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 31ms/step  
epoch 2268 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 18ms/step  
epoch 2269 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2269 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.255  
1/1 [=====] - 0s 16ms/step  
epoch 2269 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.037  
1/1 [=====] - 0s 16ms/step  
epoch 2270 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.050  
1/1 [=====] - 0s 23ms/step  
epoch 2270 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.006  
1/1 [=====] - 0s 19ms/step  
epoch 2270 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.303  
1/1 [=====] - 0s 16ms/step  
epoch 2271 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.008  
1/1 [=====] - 0s 18ms/step  
epoch 2271 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2271 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.438  
1/1 [=====] - 0s 16ms/step  
epoch 2272 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 18ms/step  
epoch 2272 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.523  
1/1 [=====] - 0s 16ms/step  
epoch 2272 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 18ms/step  
epoch 2273 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2273 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.390  
1/1 [=====] - 0s 16ms/step  
epoch 2273 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step

epoch 2274 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.008  
 1/1 [=====] - 0s 15ms/step  
 epoch 2274 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.203  
 1/1 [=====] - 0s 15ms/step  
 epoch 2274 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.044  
 1/1 [=====] - 0s 15ms/step  
 epoch 2275 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.013  
 1/1 [=====] - 0s 18ms/step  
 epoch 2275 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.295  
 1/1 [=====] - 0s 16ms/step  
 epoch 2275 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.024  
 1/1 [=====] - 0s 19ms/step  
 epoch 2276 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.883  
 1/1 [=====] - 0s 16ms/step  
 epoch 2276 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.933  
 1/1 [=====] - 0s 18ms/step  
 epoch 2276 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.063  
 1/1 [=====] - 0s 15ms/step  
 epoch 2277 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.114  
 1/1 [=====] - 0s 26ms/step  
 epoch 2277 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 24ms/step  
 epoch 2277 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.045  
 1/1 [=====] - 0s 25ms/step  
 epoch 2278 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.520  
 1/1 [=====] - 0s 22ms/step  
 epoch 2278 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.238  
 1/1 [=====] - 0s 27ms/step  
 epoch 2278 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.654  
 1/1 [=====] - 0s 22ms/step  
 epoch 2279 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.676  
 1/1 [=====] - 0s 25ms/step  
 epoch 2279 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.787  
 1/1 [=====] - 0s 16ms/step  
 epoch 2279 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.330  
 1/1 [=====] - 0s 15ms/step  
 epoch 2280 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.297  
 1/1 [=====] - 0s 17ms/step  
 epoch 2280 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.087  
 1/1 [=====] - 0s 16ms/step  
 epoch 2280 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step  
 epoch 2281 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.009  
 1/1 [=====] - 0s 18ms/step  
 epoch 2281 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.001  
 1/1 [=====] - 0s 16ms/step  
 epoch 2281 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.182  
 4/4 [=====] - 0s 51ms/step

Accuracy réelle : 100%, fausse : 26%

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1/1 [=====] - 0s 17ms/step
epoch 2282 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2282 - batch 2/3, discriminator_loss=0.000, generator_loss=1.487
1/1 [=====] - 0s 16ms/step
epoch 2282 - batch 3/3, discriminator_loss=0.000, generator_loss=0.769
1/1 [=====] - 0s 18ms/step
epoch 2283 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2283 - batch 2/3, discriminator_loss=0.000, generator_loss=0.594
1/1 [=====] - 0s 21ms/step
epoch 2283 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2284 - batch 1/3, discriminator_loss=0.000, generator_loss=0.373
1/1 [=====] - 0s 18ms/step
epoch 2284 - batch 2/3, discriminator_loss=0.000, generator_loss=0.033
1/1 [=====] - 0s 16ms/step
epoch 2284 - batch 3/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2285 - batch 1/3, discriminator_loss=0.000, generator_loss=0.531
1/1 [=====] - 0s 18ms/step
epoch 2285 - batch 2/3, discriminator_loss=0.000, generator_loss=0.549
1/1 [=====] - 0s 21ms/step
epoch 2285 - batch 3/3, discriminator_loss=0.000, generator_loss=0.048
1/1 [=====] - 0s 15ms/step
epoch 2286 - batch 1/3, discriminator_loss=0.000, generator_loss=0.007
1/1 [=====] - 0s 16ms/step
epoch 2286 - batch 2/3, discriminator_loss=0.000, generator_loss=1.505
1/1 [=====] - 0s 15ms/step
epoch 2286 - batch 3/3, discriminator_loss=0.000, generator_loss=0.103
1/1 [=====] - 0s 18ms/step
epoch 2287 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2287 - batch 2/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2287 - batch 3/3, discriminator_loss=0.153, generator_loss=1.912
1/1 [=====] - 0s 16ms/step
epoch 2288 - batch 1/3, discriminator_loss=0.000, generator_loss=14.495
1/1 [=====] - 0s 19ms/step
epoch 2288 - batch 2/3, discriminator_loss=0.000, generator_loss=17.734
1/1 [=====] - 0s 16ms/step
epoch 2288 - batch 3/3, discriminator_loss=0.005, generator_loss=20.089
1/1 [=====] - 0s 22ms/step
epoch 2289 - batch 1/3, discriminator_loss=0.000, generator_loss=27.538
1/1 [=====] - 0s 20ms/step
epoch 2289 - batch 2/3, discriminator_loss=0.137, generator_loss=30.741
1/1 [=====] - 0s 16ms/step

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epoch 2289 - batch 3/3, discriminator\_loss=0.000, generator\_loss=29.162  
1/1 [=====] - 0s 16ms/step  
epoch 2290 - batch 1/3, discriminator\_loss=0.000, generator\_loss=24.386  
1/1 [=====] - 0s 19ms/step  
epoch 2290 - batch 2/3, discriminator\_loss=0.000, generator\_loss=27.150  
1/1 [=====] - 0s 19ms/step  
epoch 2290 - batch 3/3, discriminator\_loss=0.000, generator\_loss=25.479  
1/1 [=====] - 0s 18ms/step  
epoch 2291 - batch 1/3, discriminator\_loss=0.000, generator\_loss=22.988  
1/1 [=====] - 0s 15ms/step  
epoch 2291 - batch 2/3, discriminator\_loss=0.000, generator\_loss=19.886  
1/1 [=====] - 0s 16ms/step  
epoch 2291 - batch 3/3, discriminator\_loss=0.000, generator\_loss=25.781  
1/1 [=====] - 0s 15ms/step  
epoch 2292 - batch 1/3, discriminator\_loss=0.000, generator\_loss=30.413  
1/1 [=====] - 0s 16ms/step  
epoch 2292 - batch 2/3, discriminator\_loss=0.000, generator\_loss=27.891  
1/1 [=====] - 0s 16ms/step  
epoch 2292 - batch 3/3, discriminator\_loss=0.000, generator\_loss=24.538  
1/1 [=====] - 0s 16ms/step  
epoch 2293 - batch 1/3, discriminator\_loss=0.000, generator\_loss=31.178  
1/1 [=====] - 0s 19ms/step  
epoch 2293 - batch 2/3, discriminator\_loss=0.000, generator\_loss=24.745  
1/1 [=====] - 0s 16ms/step  
epoch 2293 - batch 3/3, discriminator\_loss=0.000, generator\_loss=28.351  
1/1 [=====] - 0s 20ms/step  
epoch 2294 - batch 1/3, discriminator\_loss=0.000, generator\_loss=25.459  
1/1 [=====] - 0s 16ms/step  
epoch 2294 - batch 2/3, discriminator\_loss=0.000, generator\_loss=23.367  
1/1 [=====] - 0s 16ms/step  
epoch 2294 - batch 3/3, discriminator\_loss=0.000, generator\_loss=31.829  
1/1 [=====] - 0s 18ms/step  
epoch 2295 - batch 1/3, discriminator\_loss=0.000, generator\_loss=25.911  
1/1 [=====] - 0s 16ms/step  
epoch 2295 - batch 2/3, discriminator\_loss=0.000, generator\_loss=21.819  
1/1 [=====] - 0s 16ms/step  
epoch 2295 - batch 3/3, discriminator\_loss=0.000, generator\_loss=18.663  
1/1 [=====] - 0s 16ms/step  
epoch 2296 - batch 1/3, discriminator\_loss=0.005, generator\_loss=22.213  
1/1 [=====] - 0s 16ms/step  
epoch 2296 - batch 2/3, discriminator\_loss=0.000, generator\_loss=15.654  
1/1 [=====] - 0s 18ms/step  
epoch 2296 - batch 3/3, discriminator\_loss=0.000, generator\_loss=18.001  
1/1 [=====] - 0s 15ms/step  
epoch 2297 - batch 1/3, discriminator\_loss=0.000, generator\_loss=15.292  
1/1 [=====] - 0s 16ms/step  
epoch 2297 - batch 2/3, discriminator\_loss=0.018, generator\_loss=16.522  
1/1 [=====] - 0s 15ms/step

epoch 2297 - batch 3/3, discriminator\_loss=0.127, generator\_loss=13.804  
 1/1 [=====] - 0s 16ms/step  
 epoch 2298 - batch 1/3, discriminator\_loss=0.000, generator\_loss=12.538  
 1/1 [=====] - 0s 16ms/step  
 epoch 2298 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.340  
 1/1 [=====] - 0s 16ms/step  
 epoch 2298 - batch 3/3, discriminator\_loss=0.000, generator\_loss=11.560  
 1/1 [=====] - 0s 16ms/step  
 epoch 2299 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.178  
 1/1 [=====] - 0s 19ms/step  
 epoch 2299 - batch 2/3, discriminator\_loss=0.123, generator\_loss=9.747  
 1/1 [=====] - 0s 16ms/step  
 epoch 2299 - batch 3/3, discriminator\_loss=0.000, generator\_loss=11.469  
 1/1 [=====] - 0s 16ms/step  
 epoch 2300 - batch 1/3, discriminator\_loss=0.000, generator\_loss=8.354  
 1/1 [=====] - 0s 19ms/step  
 epoch 2300 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.668  
 1/1 [=====] - 0s 21ms/step  
 epoch 2300 - batch 3/3, discriminator\_loss=0.000, generator\_loss=14.343  
 1/1 [=====] - 0s 18ms/step  
 epoch 2301 - batch 1/3, discriminator\_loss=0.000, generator\_loss=15.551  
 1/1 [=====] - 0s 16ms/step  
 epoch 2301 - batch 2/3, discriminator\_loss=0.000, generator\_loss=11.829  
 1/1 [=====] - 0s 18ms/step  
 epoch 2301 - batch 3/3, discriminator\_loss=0.000, generator\_loss=15.318  
 4/4 [=====] - 0s 50ms/step  
 Accuracy réelle : 100%, fausse : 76%  
 1/1 [=====] - 0s 15ms/step  
 epoch 2302 - batch 1/3, discriminator\_loss=0.999, generator\_loss=27.689  
 1/1 [=====] - 0s 16ms/step  
 epoch 2302 - batch 2/3, discriminator\_loss=0.000, generator\_loss=47.383  
 1/1 [=====] - 0s 18ms/step  
 epoch 2302 - batch 3/3, discriminator\_loss=0.000, generator\_loss=72.956  
 1/1 [=====] - 0s 16ms/step  
 epoch 2303 - batch 1/3, discriminator\_loss=0.000, generator\_loss=102.300  
 1/1 [=====] - 0s 16ms/step  
 epoch 2303 - batch 2/3, discriminator\_loss=0.000, generator\_loss=105.872  
 1/1 [=====] - 0s 15ms/step  
 epoch 2303 - batch 3/3, discriminator\_loss=0.684, generator\_loss=101.090  
 1/1 [=====] - 0s 18ms/step  
 epoch 2304 - batch 1/3, discriminator\_loss=0.000, generator\_loss=98.751  
 1/1 [=====] - 0s 16ms/step  
 epoch 2304 - batch 2/3, discriminator\_loss=0.000, generator\_loss=110.177  
 1/1 [=====] - 0s 16ms/step  
 epoch 2304 - batch 3/3, discriminator\_loss=0.000, generator\_loss=105.615  
 1/1 [=====] - 0s 16ms/step  
 epoch 2305 - batch 1/3, discriminator\_loss=0.000, generator\_loss=107.649  
 1/1 [=====] - 0s 16ms/step

epoch 2305 - batch 2/3, discriminator\_loss=0.000, generator\_loss=100.383  
 1/1 [=====] - 0s 16ms/step  
 epoch 2305 - batch 3/3, discriminator\_loss=0.000, generator\_loss=106.403  
 1/1 [=====] - 0s 17ms/step  
 epoch 2306 - batch 1/3, discriminator\_loss=0.000, generator\_loss=92.269  
 1/1 [=====] - 0s 15ms/step  
 epoch 2306 - batch 2/3, discriminator\_loss=0.000, generator\_loss=94.956  
 1/1 [=====] - 0s 16ms/step  
 epoch 2306 - batch 3/3, discriminator\_loss=0.000, generator\_loss=90.752  
 1/1 [=====] - 0s 16ms/step  
 epoch 2307 - batch 1/3, discriminator\_loss=0.000, generator\_loss=78.337  
 1/1 [=====] - 0s 17ms/step  
 epoch 2307 - batch 2/3, discriminator\_loss=0.000, generator\_loss=85.385  
 1/1 [=====] - 0s 16ms/step  
 epoch 2307 - batch 3/3, discriminator\_loss=0.442, generator\_loss=102.191  
 1/1 [=====] - 0s 16ms/step  
 epoch 2308 - batch 1/3, discriminator\_loss=0.700, generator\_loss=148.863  
 1/1 [=====] - 0s 17ms/step  
 epoch 2308 - batch 2/3, discriminator\_loss=0.000, generator\_loss=175.312  
 1/1 [=====] - 0s 18ms/step  
 epoch 2308 - batch 3/3, discriminator\_loss=0.000, generator\_loss=197.730  
 1/1 [=====] - 0s 18ms/step  
 epoch 2309 - batch 1/3, discriminator\_loss=0.000, generator\_loss=213.180  
 1/1 [=====] - 0s 15ms/step  
 epoch 2309 - batch 2/3, discriminator\_loss=0.000, generator\_loss=228.921  
 1/1 [=====] - 0s 16ms/step  
 epoch 2309 - batch 3/3, discriminator\_loss=0.361, generator\_loss=196.881  
 1/1 [=====] - 0s 18ms/step  
 epoch 2310 - batch 1/3, discriminator\_loss=0.801, generator\_loss=152.830  
 1/1 [=====] - 0s 16ms/step  
 epoch 2310 - batch 2/3, discriminator\_loss=0.011, generator\_loss=102.498  
 1/1 [=====] - 0s 16ms/step  
 epoch 2310 - batch 3/3, discriminator\_loss=0.000, generator\_loss=50.469  
 1/1 [=====] - 0s 16ms/step  
 epoch 2311 - batch 1/3, discriminator\_loss=0.322, generator\_loss=15.011  
 1/1 [=====] - 0s 16ms/step  
 epoch 2311 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.431  
 1/1 [=====] - 0s 15ms/step  
 epoch 2311 - batch 3/3, discriminator\_loss=0.001, generator\_loss=3.026  
 1/1 [=====] - 0s 15ms/step  
 epoch 2312 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.038  
 1/1 [=====] - 0s 15ms/step  
 epoch 2312 - batch 2/3, discriminator\_loss=0.080, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step  
 epoch 2312 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step  
 epoch 2313 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step

epoch 2313 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step  
 epoch 2313 - batch 3/3, discriminator\_loss=0.226, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step  
 epoch 2314 - batch 1/3, discriminator\_loss=0.195, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step  
 epoch 2314 - batch 2/3, discriminator\_loss=0.363, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2314 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.411  
 1/1 [=====] - 0s 17ms/step  
 epoch 2315 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.330  
 1/1 [=====] - 0s 18ms/step  
 epoch 2315 - batch 2/3, discriminator\_loss=0.139, generator\_loss=5.638  
 1/1 [=====] - 0s 17ms/step  
 epoch 2315 - batch 3/3, discriminator\_loss=0.000, generator\_loss=14.580  
 1/1 [=====] - 0s 16ms/step  
 epoch 2316 - batch 1/3, discriminator\_loss=0.000, generator\_loss=22.558  
 1/1 [=====] - 0s 18ms/step  
 epoch 2316 - batch 2/3, discriminator\_loss=0.080, generator\_loss=18.085  
 1/1 [=====] - 0s 19ms/step  
 epoch 2316 - batch 3/3, discriminator\_loss=0.000, generator\_loss=23.451  
 1/1 [=====] - 0s 15ms/step  
 epoch 2317 - batch 1/3, discriminator\_loss=0.000, generator\_loss=20.134  
 1/1 [=====] - 0s 16ms/step  
 epoch 2317 - batch 2/3, discriminator\_loss=0.000, generator\_loss=14.375  
 1/1 [=====] - 0s 16ms/step  
 epoch 2317 - batch 3/3, discriminator\_loss=0.000, generator\_loss=12.141  
 1/1 [=====] - 0s 17ms/step  
 epoch 2318 - batch 1/3, discriminator\_loss=0.000, generator\_loss=12.365  
 1/1 [=====] - 0s 17ms/step  
 epoch 2318 - batch 2/3, discriminator\_loss=0.000, generator\_loss=13.292  
 1/1 [=====] - 0s 19ms/step  
 epoch 2318 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.441  
 1/1 [=====] - 0s 16ms/step  
 epoch 2319 - batch 1/3, discriminator\_loss=0.381, generator\_loss=9.049  
 1/1 [=====] - 0s 15ms/step  
 epoch 2319 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.169  
 1/1 [=====] - 0s 15ms/step  
 epoch 2319 - batch 3/3, discriminator\_loss=0.000, generator\_loss=10.441  
 1/1 [=====] - 0s 17ms/step  
 epoch 2320 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.814  
 1/1 [=====] - 0s 15ms/step  
 epoch 2320 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.840  
 1/1 [=====] - 0s 15ms/step  
 epoch 2320 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.227  
 1/1 [=====] - 0s 15ms/step  
 epoch 2321 - batch 1/3, discriminator\_loss=0.000, generator\_loss=3.222  
 1/1 [=====] - 0s 26ms/step



epoch 2321 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.402  
 1/1 [=====] - 0s 15ms/step  
 epoch 2321 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.714  
 4/4 [=====] - 0s 51ms/step  
 Accuracy réelle : 100%, fausse : 25%  
 1/1 [=====] - 0s 15ms/step  
 epoch 2322 - batch 1/3, discriminator\_loss=0.000, generator\_loss=3.641  
 1/1 [=====] - 0s 16ms/step  
 epoch 2322 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.151  
 1/1 [=====] - 0s 16ms/step  
 epoch 2322 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.478  
 1/1 [=====] - 0s 16ms/step  
 epoch 2323 - batch 1/3, discriminator\_loss=0.004, generator\_loss=0.359  
 1/1 [=====] - 0s 15ms/step  
 epoch 2323 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.374  
 1/1 [=====] - 0s 18ms/step  
 epoch 2323 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.377  
 1/1 [=====] - 0s 15ms/step  
 epoch 2324 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.397  
 1/1 [=====] - 0s 15ms/step  
 epoch 2324 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.008  
 1/1 [=====] - 0s 18ms/step  
 epoch 2324 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.292  
 1/1 [=====] - 0s 17ms/step  
 epoch 2325 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.156  
 1/1 [=====] - 0s 24ms/step  
 epoch 2325 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.623  
 1/1 [=====] - 0s 16ms/step  
 epoch 2325 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.468  
 1/1 [=====] - 0s 16ms/step  
 epoch 2326 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 18ms/step  
 epoch 2326 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.057  
 1/1 [=====] - 0s 16ms/step  
 epoch 2326 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.904  
 1/1 [=====] - 0s 15ms/step  
 epoch 2327 - batch 1/3, discriminator\_loss=0.083, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2327 - batch 2/3, discriminator\_loss=0.002, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step  
 epoch 2327 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2328 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2328 - batch 2/3, discriminator\_loss=0.148, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2328 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step

epoch 2329 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2329 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step  
 epoch 2329 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step  
 epoch 2330 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step  
 epoch 2330 - batch 2/3, discriminator\_loss=0.451, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2330 - batch 3/3, discriminator\_loss=0.162, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2331 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2331 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 18ms/step  
 epoch 2331 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step  
 epoch 2332 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 25ms/step  
 epoch 2332 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.208  
 1/1 [=====] - 0s 17ms/step  
 epoch 2332 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.211  
 1/1 [=====] - 0s 15ms/step  
 epoch 2333 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2333 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.005  
 1/1 [=====] - 0s 28ms/step  
 epoch 2333 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.408  
 1/1 [=====] - 0s 15ms/step  
 epoch 2334 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.629  
 1/1 [=====] - 0s 18ms/step  
 epoch 2334 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 18ms/step  
 epoch 2334 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.050  
 1/1 [=====] - 0s 16ms/step  
 epoch 2335 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.559  
 1/1 [=====] - 0s 16ms/step  
 epoch 2335 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.896  
 1/1 [=====] - 0s 17ms/step  
 epoch 2335 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.526  
 1/1 [=====] - 0s 18ms/step  
 epoch 2336 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.341  
 1/1 [=====] - 0s 18ms/step  
 epoch 2336 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.522  
 1/1 [=====] - 0s 18ms/step  
 epoch 2336 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.185  
 1/1 [=====] - 0s 16ms/step

epoch 2337 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.684  
1/1 [=====] - 0s 21ms/step  
epoch 2337 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.130  
1/1 [=====] - 0s 18ms/step  
epoch 2337 - batch 3/3, discriminator\_loss=0.014, generator\_loss=0.001  
1/1 [=====] - 0s 15ms/step  
epoch 2338 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.008  
1/1 [=====] - 0s 15ms/step  
epoch 2338 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2338 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.001  
1/1 [=====] - 0s 16ms/step  
epoch 2339 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2339 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2339 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.001  
1/1 [=====] - 0s 18ms/step  
epoch 2340 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.001  
1/1 [=====] - 0s 19ms/step  
epoch 2340 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.004  
1/1 [=====] - 0s 20ms/step  
epoch 2340 - batch 3/3, discriminator\_loss=0.002, generator\_loss=0.318  
1/1 [=====] - 0s 18ms/step  
epoch 2341 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 17ms/step  
epoch 2341 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.021  
1/1 [=====] - 0s 18ms/step  
epoch 2341 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.137  
4/4 [=====] - 0s 51ms/step  
Accuracy réelle : 100%, fausse : 8%  
1/1 [=====] - 0s 15ms/step  
epoch 2342 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2342 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2342 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2343 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.172  
1/1 [=====] - 0s 18ms/step  
epoch 2343 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2343 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2344 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 27ms/step  
epoch 2344 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 17ms/step

epoch 2344 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 23ms/step  
epoch 2345 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.037  
1/1 [=====] - 0s 16ms/step  
epoch 2345 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.229  
1/1 [=====] - 0s 15ms/step  
epoch 2345 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2346 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 20ms/step  
epoch 2346 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 18ms/step  
epoch 2346 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 18ms/step  
epoch 2347 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.187  
1/1 [=====] - 0s 15ms/step  
epoch 2347 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2347 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.001  
1/1 [=====] - 0s 18ms/step  
epoch 2348 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 22ms/step  
epoch 2348 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2348 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.258  
1/1 [=====] - 0s 16ms/step  
epoch 2349 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.080  
1/1 [=====] - 0s 15ms/step  
epoch 2349 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.078  
1/1 [=====] - 0s 18ms/step  
epoch 2349 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.055  
1/1 [=====] - 0s 18ms/step  
epoch 2350 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 16ms/step  
epoch 2350 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2350 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2351 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.005  
1/1 [=====] - 0s 18ms/step  
epoch 2351 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2351 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 15ms/step  
epoch 2352 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.174  
1/1 [=====] - 0s 17ms/step  
epoch 2352 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.001  
1/1 [=====] - 0s 16ms/step

epoch 2352 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2353 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2353 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.019  
 1/1 [=====] - 0s 18ms/step  
 epoch 2353 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 16ms/step  
 epoch 2354 - batch 1/3, discriminator\_loss=0.001, generator\_loss=0.001  
 1/1 [=====] - 0s 16ms/step  
 epoch 2354 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.041  
 1/1 [=====] - 0s 17ms/step  
 epoch 2354 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.277  
 1/1 [=====] - 0s 15ms/step  
 epoch 2355 - batch 1/3, discriminator\_loss=0.243, generator\_loss=0.030  
 1/1 [=====] - 0s 15ms/step  
 epoch 2355 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.199  
 1/1 [=====] - 0s 18ms/step  
 epoch 2355 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.669  
 1/1 [=====] - 0s 17ms/step  
 epoch 2356 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.281  
 1/1 [=====] - 0s 15ms/step  
 epoch 2356 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.450  
 1/1 [=====] - 0s 20ms/step  
 epoch 2356 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.734  
 1/1 [=====] - 0s 22ms/step  
 epoch 2357 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2357 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.020  
 1/1 [=====] - 0s 18ms/step  
 epoch 2357 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.251  
 1/1 [=====] - 0s 16ms/step  
 epoch 2358 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.972  
 1/1 [=====] - 0s 15ms/step  
 epoch 2358 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.670  
 1/1 [=====] - 0s 20ms/step  
 epoch 2358 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.605  
 1/1 [=====] - 0s 15ms/step  
 epoch 2359 - batch 1/3, discriminator\_loss=0.130, generator\_loss=1.621  
 1/1 [=====] - 0s 15ms/step  
 epoch 2359 - batch 2/3, discriminator\_loss=0.000, generator\_loss=4.636  
 1/1 [=====] - 0s 16ms/step  
 epoch 2359 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.352  
 1/1 [=====] - 0s 16ms/step  
 epoch 2360 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.291  
 1/1 [=====] - 0s 15ms/step  
 epoch 2360 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.882  
 1/1 [=====] - 0s 15ms/step

epoch 2360 - batch 3/3, discriminator\_loss=0.483, generator\_loss=2.614  
 1/1 [=====] - 0s 16ms/step  
 epoch 2361 - batch 1/3, discriminator\_loss=0.015, generator\_loss=1.804  
 1/1 [=====] - 0s 21ms/step  
 epoch 2361 - batch 2/3, discriminator\_loss=0.001, generator\_loss=0.401  
 1/1 [=====] - 0s 15ms/step  
 epoch 2361 - batch 3/3, discriminator\_loss=0.001, generator\_loss=0.351  
 4/4 [=====] - 0s 50ms/step  
 Accuracy réelle : 100%, fausse : 40%  
 1/1 [=====] - 0s 24ms/step  
 epoch 2362 - batch 1/3, discriminator\_loss=0.169, generator\_loss=1.270  
 1/1 [=====] - 0s 15ms/step  
 epoch 2362 - batch 2/3, discriminator\_loss=0.000, generator\_loss=4.459  
 1/1 [=====] - 0s 22ms/step  
 epoch 2362 - batch 3/3, discriminator\_loss=0.001, generator\_loss=8.911  
 1/1 [=====] - 0s 16ms/step  
 epoch 2363 - batch 1/3, discriminator\_loss=1.787, generator\_loss=18.474  
 1/1 [=====] - 0s 17ms/step  
 epoch 2363 - batch 2/3, discriminator\_loss=0.000, generator\_loss=35.458  
 1/1 [=====] - 0s 16ms/step  
 epoch 2363 - batch 3/3, discriminator\_loss=0.000, generator\_loss=47.026  
 1/1 [=====] - 0s 15ms/step  
 epoch 2364 - batch 1/3, discriminator\_loss=0.009, generator\_loss=47.868  
 1/1 [=====] - 0s 16ms/step  
 epoch 2364 - batch 2/3, discriminator\_loss=0.000, generator\_loss=53.860  
 1/1 [=====] - 0s 15ms/step  
 epoch 2364 - batch 3/3, discriminator\_loss=0.000, generator\_loss=58.958  
 1/1 [=====] - 0s 15ms/step  
 epoch 2365 - batch 1/3, discriminator\_loss=0.000, generator\_loss=60.902  
 1/1 [=====] - 0s 15ms/step  
 epoch 2365 - batch 2/3, discriminator\_loss=0.000, generator\_loss=61.592  
 1/1 [=====] - 0s 15ms/step  
 epoch 2365 - batch 3/3, discriminator\_loss=0.001, generator\_loss=59.878  
 1/1 [=====] - 0s 17ms/step  
 epoch 2366 - batch 1/3, discriminator\_loss=0.660, generator\_loss=57.762  
 1/1 [=====] - 0s 18ms/step  
 epoch 2366 - batch 2/3, discriminator\_loss=0.224, generator\_loss=56.129  
 1/1 [=====] - 0s 15ms/step  
 epoch 2366 - batch 3/3, discriminator\_loss=0.000, generator\_loss=60.159  
 1/1 [=====] - 0s 15ms/step  
 epoch 2367 - batch 1/3, discriminator\_loss=0.000, generator\_loss=62.369  
 1/1 [=====] - 0s 16ms/step  
 epoch 2367 - batch 2/3, discriminator\_loss=0.000, generator\_loss=59.601  
 1/1 [=====] - 0s 19ms/step  
 epoch 2367 - batch 3/3, discriminator\_loss=0.000, generator\_loss=60.920  
 1/1 [=====] - 0s 15ms/step  
 epoch 2368 - batch 1/3, discriminator\_loss=0.000, generator\_loss=60.609  
 1/1 [=====] - 0s 15ms/step

epoch 2368 - batch 2/3, discriminator\_loss=0.000, generator\_loss=60.421  
 1/1 [=====] - 0s 16ms/step  
 epoch 2368 - batch 3/3, discriminator\_loss=0.000, generator\_loss=57.525  
 1/1 [=====] - 0s 15ms/step  
 epoch 2369 - batch 1/3, discriminator\_loss=0.227, generator\_loss=61.733  
 1/1 [=====] - 0s 17ms/step  
 epoch 2369 - batch 2/3, discriminator\_loss=0.000, generator\_loss=66.855  
 1/1 [=====] - 0s 17ms/step  
 epoch 2369 - batch 3/3, discriminator\_loss=0.000, generator\_loss=62.454  
 1/1 [=====] - 0s 18ms/step  
 epoch 2370 - batch 1/3, discriminator\_loss=0.182, generator\_loss=66.120  
 1/1 [=====] - 0s 20ms/step  
 epoch 2370 - batch 2/3, discriminator\_loss=0.046, generator\_loss=68.111  
 1/1 [=====] - 0s 15ms/step  
 epoch 2370 - batch 3/3, discriminator\_loss=0.234, generator\_loss=61.267  
 1/1 [=====] - 0s 18ms/step  
 epoch 2371 - batch 1/3, discriminator\_loss=0.000, generator\_loss=56.425  
 1/1 [=====] - 0s 19ms/step  
 epoch 2371 - batch 2/3, discriminator\_loss=0.001, generator\_loss=57.109  
 1/1 [=====] - 0s 15ms/step  
 epoch 2371 - batch 3/3, discriminator\_loss=0.000, generator\_loss=56.576  
 1/1 [=====] - 0s 16ms/step  
 epoch 2372 - batch 1/3, discriminator\_loss=0.000, generator\_loss=47.376  
 1/1 [=====] - 0s 22ms/step  
 epoch 2372 - batch 2/3, discriminator\_loss=0.040, generator\_loss=47.874  
 1/1 [=====] - 0s 19ms/step  
 epoch 2372 - batch 3/3, discriminator\_loss=0.000, generator\_loss=42.976  
 1/1 [=====] - 0s 20ms/step  
 epoch 2373 - batch 1/3, discriminator\_loss=0.000, generator\_loss=34.790  
 1/1 [=====] - 0s 23ms/step  
 epoch 2373 - batch 2/3, discriminator\_loss=0.000, generator\_loss=25.687  
 1/1 [=====] - 0s 17ms/step  
 epoch 2373 - batch 3/3, discriminator\_loss=0.000, generator\_loss=18.899  
 1/1 [=====] - 0s 17ms/step  
 epoch 2374 - batch 1/3, discriminator\_loss=0.000, generator\_loss=10.014  
 1/1 [=====] - 0s 16ms/step  
 epoch 2374 - batch 2/3, discriminator\_loss=0.427, generator\_loss=14.520  
 1/1 [=====] - 0s 19ms/step  
 epoch 2374 - batch 3/3, discriminator\_loss=0.000, generator\_loss=22.321  
 1/1 [=====] - 0s 16ms/step  
 epoch 2375 - batch 1/3, discriminator\_loss=0.876, generator\_loss=35.807  
 1/1 [=====] - 0s 18ms/step  
 epoch 2375 - batch 2/3, discriminator\_loss=0.000, generator\_loss=50.361  
 1/1 [=====] - 0s 18ms/step  
 epoch 2375 - batch 3/3, discriminator\_loss=0.000, generator\_loss=63.006  
 1/1 [=====] - 0s 16ms/step  
 epoch 2376 - batch 1/3, discriminator\_loss=0.000, generator\_loss=64.740  
 1/1 [=====] - 0s 16ms/step

epoch 2376 - batch 2/3, discriminator\_loss=0.000, generator\_loss=68.057  
 1/1 [=====] - 0s 15ms/step  
 epoch 2376 - batch 3/3, discriminator\_loss=0.000, generator\_loss=70.703  
 1/1 [=====] - 0s 15ms/step  
 epoch 2377 - batch 1/3, discriminator\_loss=0.000, generator\_loss=71.253  
 1/1 [=====] - 0s 20ms/step  
 epoch 2377 - batch 2/3, discriminator\_loss=0.000, generator\_loss=75.168  
 1/1 [=====] - 0s 16ms/step  
 epoch 2377 - batch 3/3, discriminator\_loss=0.000, generator\_loss=78.872  
 1/1 [=====] - 0s 15ms/step  
 epoch 2378 - batch 1/3, discriminator\_loss=0.001, generator\_loss=74.861  
 1/1 [=====] - 0s 16ms/step  
 epoch 2378 - batch 2/3, discriminator\_loss=0.026, generator\_loss=75.385  
 1/1 [=====] - 0s 23ms/step  
 epoch 2378 - batch 3/3, discriminator\_loss=0.800, generator\_loss=74.793  
 1/1 [=====] - 0s 18ms/step  
 epoch 2379 - batch 1/3, discriminator\_loss=0.001, generator\_loss=71.568  
 1/1 [=====] - 0s 20ms/step  
 epoch 2379 - batch 2/3, discriminator\_loss=0.000, generator\_loss=74.251  
 1/1 [=====] - 0s 21ms/step  
 epoch 2379 - batch 3/3, discriminator\_loss=0.000, generator\_loss=73.307  
 1/1 [=====] - 0s 17ms/step  
 epoch 2380 - batch 1/3, discriminator\_loss=0.000, generator\_loss=76.029  
 1/1 [=====] - 0s 17ms/step  
 epoch 2380 - batch 2/3, discriminator\_loss=0.000, generator\_loss=70.411  
 1/1 [=====] - 0s 15ms/step  
 epoch 2380 - batch 3/3, discriminator\_loss=0.000, generator\_loss=71.388  
 1/1 [=====] - 0s 16ms/step  
 epoch 2381 - batch 1/3, discriminator\_loss=0.474, generator\_loss=61.069  
 1/1 [=====] - 0s 15ms/step  
 epoch 2381 - batch 2/3, discriminator\_loss=0.000, generator\_loss=53.189  
 1/1 [=====] - 0s 15ms/step  
 epoch 2381 - batch 3/3, discriminator\_loss=0.000, generator\_loss=52.659  
 4/4 [=====] - 0s 50ms/step  
 Accuracy réelle : 100%, fausse : 99%  
 1/1 [=====] - 0s 15ms/step  
 epoch 2382 - batch 1/3, discriminator\_loss=0.000, generator\_loss=50.791  
 1/1 [=====] - 0s 16ms/step  
 epoch 2382 - batch 2/3, discriminator\_loss=0.010, generator\_loss=44.559  
 1/1 [=====] - 0s 17ms/step  
 epoch 2382 - batch 3/3, discriminator\_loss=0.000, generator\_loss=33.673  
 1/1 [=====] - 0s 15ms/step  
 epoch 2383 - batch 1/3, discriminator\_loss=0.000, generator\_loss=37.796  
 1/1 [=====] - 0s 20ms/step  
 epoch 2383 - batch 2/3, discriminator\_loss=0.035, generator\_loss=37.276  
 1/1 [=====] - 0s 17ms/step  
 epoch 2383 - batch 3/3, discriminator\_loss=0.000, generator\_loss=34.545  
 1/1 [=====] - 0s 19ms/step



epoch 2384 - batch 1/3, discriminator\_loss=0.104, generator\_loss=40.955  
 1/1 [=====] - 0s 15ms/step  
 epoch 2384 - batch 2/3, discriminator\_loss=0.002, generator\_loss=42.842  
 1/1 [=====] - 0s 15ms/step  
 epoch 2384 - batch 3/3, discriminator\_loss=0.000, generator\_loss=43.604  
 1/1 [=====] - 0s 15ms/step  
 epoch 2385 - batch 1/3, discriminator\_loss=0.000, generator\_loss=48.870  
 1/1 [=====] - 0s 16ms/step  
 epoch 2385 - batch 2/3, discriminator\_loss=0.000, generator\_loss=49.286  
 1/1 [=====] - 0s 16ms/step  
 epoch 2385 - batch 3/3, discriminator\_loss=0.000, generator\_loss=53.521  
 1/1 [=====] - 0s 15ms/step  
 epoch 2386 - batch 1/3, discriminator\_loss=0.000, generator\_loss=60.716  
 1/1 [=====] - 0s 16ms/step  
 epoch 2386 - batch 2/3, discriminator\_loss=0.000, generator\_loss=52.940  
 1/1 [=====] - 0s 15ms/step  
 epoch 2386 - batch 3/3, discriminator\_loss=0.000, generator\_loss=55.065  
 1/1 [=====] - 0s 18ms/step  
 epoch 2387 - batch 1/3, discriminator\_loss=0.077, generator\_loss=64.329  
 1/1 [=====] - 0s 15ms/step  
 epoch 2387 - batch 2/3, discriminator\_loss=0.000, generator\_loss=67.588  
 1/1 [=====] - 0s 15ms/step  
 epoch 2387 - batch 3/3, discriminator\_loss=0.000, generator\_loss=68.958  
 1/1 [=====] - 0s 18ms/step  
 epoch 2388 - batch 1/3, discriminator\_loss=0.000, generator\_loss=74.679  
 1/1 [=====] - 0s 16ms/step  
 epoch 2388 - batch 2/3, discriminator\_loss=0.000, generator\_loss=76.384  
 1/1 [=====] - 0s 16ms/step  
 epoch 2388 - batch 3/3, discriminator\_loss=0.000, generator\_loss=73.137  
 1/1 [=====] - 0s 18ms/step  
 epoch 2389 - batch 1/3, discriminator\_loss=0.000, generator\_loss=70.184  
 1/1 [=====] - 0s 15ms/step  
 epoch 2389 - batch 2/3, discriminator\_loss=0.000, generator\_loss=80.908  
 1/1 [=====] - 0s 18ms/step  
 epoch 2389 - batch 3/3, discriminator\_loss=0.000, generator\_loss=80.132  
 1/1 [=====] - 0s 18ms/step  
 epoch 2390 - batch 1/3, discriminator\_loss=0.000, generator\_loss=77.659  
 1/1 [=====] - 0s 15ms/step  
 epoch 2390 - batch 2/3, discriminator\_loss=0.000, generator\_loss=76.599  
 1/1 [=====] - 0s 17ms/step  
 epoch 2390 - batch 3/3, discriminator\_loss=0.000, generator\_loss=76.515  
 1/1 [=====] - 0s 15ms/step  
 epoch 2391 - batch 1/3, discriminator\_loss=0.004, generator\_loss=74.212  
 1/1 [=====] - 0s 24ms/step  
 epoch 2391 - batch 2/3, discriminator\_loss=0.000, generator\_loss=71.625  
 1/1 [=====] - 0s 15ms/step  
 epoch 2391 - batch 3/3, discriminator\_loss=0.000, generator\_loss=72.946  
 1/1 [=====] - 0s 15ms/step

epoch 2392 - batch 1/3, discriminator\_loss=0.000, generator\_loss=66.447  
1/1 [=====] - 0s 16ms/step  
epoch 2392 - batch 2/3, discriminator\_loss=0.003, generator\_loss=64.353  
1/1 [=====] - 0s 18ms/step  
epoch 2392 - batch 3/3, discriminator\_loss=0.076, generator\_loss=59.190  
1/1 [=====] - 0s 18ms/step  
epoch 2393 - batch 1/3, discriminator\_loss=0.467, generator\_loss=51.665  
1/1 [=====] - 0s 15ms/step  
epoch 2393 - batch 2/3, discriminator\_loss=0.003, generator\_loss=46.172  
1/1 [=====] - 0s 18ms/step  
epoch 2393 - batch 3/3, discriminator\_loss=0.000, generator\_loss=44.913  
1/1 [=====] - 0s 15ms/step  
epoch 2394 - batch 1/3, discriminator\_loss=0.194, generator\_loss=39.247  
1/1 [=====] - 0s 16ms/step  
epoch 2394 - batch 2/3, discriminator\_loss=0.000, generator\_loss=35.762  
1/1 [=====] - 0s 15ms/step  
epoch 2394 - batch 3/3, discriminator\_loss=0.000, generator\_loss=27.578  
1/1 [=====] - 0s 19ms/step  
epoch 2395 - batch 1/3, discriminator\_loss=0.000, generator\_loss=20.601  
1/1 [=====] - 0s 18ms/step  
epoch 2395 - batch 2/3, discriminator\_loss=0.000, generator\_loss=16.449  
1/1 [=====] - 0s 15ms/step  
epoch 2395 - batch 3/3, discriminator\_loss=0.467, generator\_loss=12.252  
1/1 [=====] - 0s 21ms/step  
epoch 2396 - batch 1/3, discriminator\_loss=0.010, generator\_loss=14.977  
1/1 [=====] - 0s 16ms/step  
epoch 2396 - batch 2/3, discriminator\_loss=0.147, generator\_loss=15.025  
1/1 [=====] - 0s 19ms/step  
epoch 2396 - batch 3/3, discriminator\_loss=0.214, generator\_loss=16.243  
1/1 [=====] - 0s 17ms/step  
epoch 2397 - batch 1/3, discriminator\_loss=0.000, generator\_loss=25.750  
1/1 [=====] - 0s 21ms/step  
epoch 2397 - batch 2/3, discriminator\_loss=0.000, generator\_loss=25.863  
1/1 [=====] - 0s 20ms/step  
epoch 2397 - batch 3/3, discriminator\_loss=0.034, generator\_loss=31.858  
1/1 [=====] - 0s 17ms/step  
epoch 2398 - batch 1/3, discriminator\_loss=0.000, generator\_loss=30.317  
1/1 [=====] - 0s 15ms/step  
epoch 2398 - batch 2/3, discriminator\_loss=0.000, generator\_loss=33.808  
1/1 [=====] - 0s 15ms/step  
epoch 2398 - batch 3/3, discriminator\_loss=0.038, generator\_loss=31.909  
1/1 [=====] - 0s 15ms/step  
epoch 2399 - batch 1/3, discriminator\_loss=0.000, generator\_loss=31.110  
1/1 [=====] - 0s 18ms/step  
epoch 2399 - batch 2/3, discriminator\_loss=0.176, generator\_loss=21.048  
1/1 [=====] - 0s 15ms/step  
epoch 2399 - batch 3/3, discriminator\_loss=0.000, generator\_loss=16.282  
1/1 [=====] - 0s 15ms/step

epoch 2400 - batch 1/3, discriminator\_loss=0.000, generator\_loss=11.006  
 1/1 [=====] - 0s 15ms/step  
 epoch 2400 - batch 2/3, discriminator\_loss=0.000, generator\_loss=7.240  
 1/1 [=====] - 0s 17ms/step  
 epoch 2400 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.669  
 1/1 [=====] - 0s 15ms/step  
 epoch 2401 - batch 1/3, discriminator\_loss=0.001, generator\_loss=1.146  
 1/1 [=====] - 0s 16ms/step  
 epoch 2401 - batch 2/3, discriminator\_loss=0.106, generator\_loss=1.053  
 1/1 [=====] - 0s 17ms/step  
 epoch 2401 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.393  
 4/4 [=====] - 0s 51ms/step  
 Accuracy réelle : 100%, fausse : 71%  
 1/1 [=====] - 0s 17ms/step  
 epoch 2402 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.212  
 1/1 [=====] - 0s 15ms/step  
 epoch 2402 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.048  
 1/1 [=====] - 0s 15ms/step  
 epoch 2402 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.040  
 1/1 [=====] - 0s 15ms/step  
 epoch 2403 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.173  
 1/1 [=====] - 0s 15ms/step  
 epoch 2403 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.084  
 1/1 [=====] - 0s 16ms/step  
 epoch 2403 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.482  
 1/1 [=====] - 0s 15ms/step  
 epoch 2404 - batch 1/3, discriminator\_loss=0.162, generator\_loss=0.426  
 1/1 [=====] - 0s 15ms/step  
 epoch 2404 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.686  
 1/1 [=====] - 0s 15ms/step  
 epoch 2404 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.258  
 1/1 [=====] - 0s 15ms/step  
 epoch 2405 - batch 1/3, discriminator\_loss=0.000, generator\_loss=9.811  
 1/1 [=====] - 0s 15ms/step  
 epoch 2405 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.889  
 1/1 [=====] - 0s 28ms/step  
 epoch 2405 - batch 3/3, discriminator\_loss=0.000, generator\_loss=17.222  
 1/1 [=====] - 0s 19ms/step  
 epoch 2406 - batch 1/3, discriminator\_loss=0.851, generator\_loss=2.604  
 1/1 [=====] - 0s 16ms/step  
 epoch 2406 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.991  
 1/1 [=====] - 0s 18ms/step  
 epoch 2406 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.738  
 1/1 [=====] - 0s 17ms/step  
 epoch 2407 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.331  
 1/1 [=====] - 0s 15ms/step  
 epoch 2407 - batch 2/3, discriminator\_loss=0.564, generator\_loss=0.352  
 1/1 [=====] - 0s 15ms/step

epoch 2407 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.329  
 1/1 [=====] - 0s 17ms/step  
 epoch 2408 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.416  
 1/1 [=====] - 0s 15ms/step  
 epoch 2408 - batch 2/3, discriminator\_loss=0.001, generator\_loss=2.027  
 1/1 [=====] - 0s 18ms/step  
 epoch 2408 - batch 3/3, discriminator\_loss=0.006, generator\_loss=2.047  
 1/1 [=====] - 0s 15ms/step  
 epoch 2409 - batch 1/3, discriminator\_loss=0.001, generator\_loss=3.376  
 1/1 [=====] - 0s 18ms/step  
 epoch 2409 - batch 2/3, discriminator\_loss=0.000, generator\_loss=4.449  
 1/1 [=====] - 0s 17ms/step  
 epoch 2409 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.578  
 1/1 [=====] - 0s 16ms/step  
 epoch 2410 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.295  
 1/1 [=====] - 0s 15ms/step  
 epoch 2410 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.879  
 1/1 [=====] - 0s 15ms/step  
 epoch 2410 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.350  
 1/1 [=====] - 0s 15ms/step  
 epoch 2411 - batch 1/3, discriminator\_loss=0.357, generator\_loss=9.025  
 1/1 [=====] - 0s 15ms/step  
 epoch 2411 - batch 2/3, discriminator\_loss=0.000, generator\_loss=10.799  
 1/1 [=====] - 0s 18ms/step  
 epoch 2411 - batch 3/3, discriminator\_loss=0.119, generator\_loss=16.850  
 1/1 [=====] - 0s 16ms/step  
 epoch 2412 - batch 1/3, discriminator\_loss=0.000, generator\_loss=20.871  
 1/1 [=====] - 0s 15ms/step  
 epoch 2412 - batch 2/3, discriminator\_loss=0.000, generator\_loss=28.505  
 1/1 [=====] - 0s 16ms/step  
 epoch 2412 - batch 3/3, discriminator\_loss=0.000, generator\_loss=30.306  
 1/1 [=====] - 0s 18ms/step  
 epoch 2413 - batch 1/3, discriminator\_loss=0.000, generator\_loss=36.280  
 1/1 [=====] - 0s 15ms/step  
 epoch 2413 - batch 2/3, discriminator\_loss=0.009, generator\_loss=38.955  
 1/1 [=====] - 0s 16ms/step  
 epoch 2413 - batch 3/3, discriminator\_loss=0.232, generator\_loss=33.760  
 1/1 [=====] - 0s 16ms/step  
 epoch 2414 - batch 1/3, discriminator\_loss=0.009, generator\_loss=33.699  
 1/1 [=====] - 0s 18ms/step  
 epoch 2414 - batch 2/3, discriminator\_loss=0.000, generator\_loss=31.437  
 1/1 [=====] - 0s 16ms/step  
 epoch 2414 - batch 3/3, discriminator\_loss=0.000, generator\_loss=29.830  
 1/1 [=====] - 0s 15ms/step  
 epoch 2415 - batch 1/3, discriminator\_loss=0.000, generator\_loss=28.192  
 1/1 [=====] - 0s 15ms/step  
 epoch 2415 - batch 2/3, discriminator\_loss=0.000, generator\_loss=28.752  
 1/1 [=====] - 0s 23ms/step

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epoch 2415 - batch 3/3, discriminator_loss=0.000, generator_loss=29.349
1/1 [=====] - 0s 15ms/step
epoch 2416 - batch 1/3, discriminator_loss=0.000, generator_loss=28.867
1/1 [=====] - 0s 15ms/step
epoch 2416 - batch 2/3, discriminator_loss=0.000, generator_loss=28.194
1/1 [=====] - 0s 15ms/step
epoch 2416 - batch 3/3, discriminator_loss=0.180, generator_loss=17.048
1/1 [=====] - 0s 15ms/step
epoch 2417 - batch 1/3, discriminator_loss=0.000, generator_loss=10.856
1/1 [=====] - 0s 19ms/step
epoch 2417 - batch 2/3, discriminator_loss=0.000, generator_loss=8.061
1/1 [=====] - 0s 20ms/step
epoch 2417 - batch 3/3, discriminator_loss=0.000, generator_loss=2.121
1/1 [=====] - 0s 18ms/step
epoch 2418 - batch 1/3, discriminator_loss=0.000, generator_loss=0.984
1/1 [=====] - 0s 15ms/step
epoch 2418 - batch 2/3, discriminator_loss=0.000, generator_loss=1.419
1/1 [=====] - 0s 18ms/step
epoch 2418 - batch 3/3, discriminator_loss=0.436, generator_loss=1.731
1/1 [=====] - 0s 15ms/step
epoch 2419 - batch 1/3, discriminator_loss=0.002, generator_loss=0.690
1/1 [=====] - 0s 16ms/step
epoch 2419 - batch 2/3, discriminator_loss=0.000, generator_loss=2.272
1/1 [=====] - 0s 16ms/step
epoch 2419 - batch 3/3, discriminator_loss=0.081, generator_loss=6.475
1/1 [=====] - 0s 19ms/step
epoch 2420 - batch 1/3, discriminator_loss=0.000, generator_loss=9.182
1/1 [=====] - 0s 19ms/step
epoch 2420 - batch 2/3, discriminator_loss=0.001, generator_loss=9.673
1/1 [=====] - 0s 16ms/step
epoch 2420 - batch 3/3, discriminator_loss=0.000, generator_loss=13.277
1/1 [=====] - 0s 15ms/step
epoch 2421 - batch 1/3, discriminator_loss=0.000, generator_loss=14.945
1/1 [=====] - 0s 15ms/step
epoch 2421 - batch 2/3, discriminator_loss=0.000, generator_loss=17.653
1/1 [=====] - 0s 17ms/step
epoch 2421 - batch 3/3, discriminator_loss=0.701, generator_loss=9.110
4/4 [=====] - 0s 51ms/step
Accuracy réelle : 98%, fausse : 100%
1/1 [=====] - 0s 15ms/step
epoch 2422 - batch 1/3, discriminator_loss=0.090, generator_loss=4.691
1/1 [=====] - 0s 17ms/step
epoch 2422 - batch 2/3, discriminator_loss=0.000, generator_loss=2.729
1/1 [=====] - 0s 15ms/step
epoch 2422 - batch 3/3, discriminator_loss=0.000, generator_loss=0.424
1/1 [=====] - 0s 17ms/step
epoch 2423 - batch 1/3, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step

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epoch 2423 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.057  
 1/1 [=====] - 0s 15ms/step  
 epoch 2423 - batch 3/3, discriminator\_loss=0.023, generator\_loss=0.092  
 1/1 [=====] - 0s 15ms/step  
 epoch 2424 - batch 1/3, discriminator\_loss=0.002, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2424 - batch 2/3, discriminator\_loss=0.030, generator\_loss=0.000  
 1/1 [=====] - 0s 15ms/step  
 epoch 2424 - batch 3/3, discriminator\_loss=0.331, generator\_loss=0.475  
 1/1 [=====] - 0s 17ms/step  
 epoch 2425 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.966  
 1/1 [=====] - 0s 19ms/step  
 epoch 2425 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.481  
 1/1 [=====] - 0s 15ms/step  
 epoch 2425 - batch 3/3, discriminator\_loss=0.003, generator\_loss=7.824  
 1/1 [=====] - 0s 16ms/step  
 epoch 2426 - batch 1/3, discriminator\_loss=0.000, generator\_loss=11.519  
 1/1 [=====] - 0s 18ms/step  
 epoch 2426 - batch 2/3, discriminator\_loss=0.526, generator\_loss=12.762  
 1/1 [=====] - 0s 16ms/step  
 epoch 2426 - batch 3/3, discriminator\_loss=0.007, generator\_loss=11.642  
 1/1 [=====] - 0s 15ms/step  
 epoch 2427 - batch 1/3, discriminator\_loss=0.068, generator\_loss=9.027  
 1/1 [=====] - 0s 18ms/step  
 epoch 2427 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.652  
 1/1 [=====] - 0s 15ms/step  
 epoch 2427 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.491  
 1/1 [=====] - 0s 15ms/step  
 epoch 2428 - batch 1/3, discriminator\_loss=0.000, generator\_loss=2.395  
 1/1 [=====] - 0s 18ms/step  
 epoch 2428 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.754  
 1/1 [=====] - 0s 16ms/step  
 epoch 2428 - batch 3/3, discriminator\_loss=0.088, generator\_loss=1.703  
 1/1 [=====] - 0s 15ms/step  
 epoch 2429 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.009  
 1/1 [=====] - 0s 16ms/step  
 epoch 2429 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.491  
 1/1 [=====] - 0s 16ms/step  
 epoch 2429 - batch 3/3, discriminator\_loss=0.009, generator\_loss=0.561  
 1/1 [=====] - 0s 16ms/step  
 epoch 2430 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.000  
 1/1 [=====] - 0s 19ms/step  
 epoch 2430 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.291  
 1/1 [=====] - 0s 16ms/step  
 epoch 2430 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.108  
 1/1 [=====] - 0s 16ms/step  
 epoch 2431 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.314  
 1/1 [=====] - 0s 16ms/step

epoch 2431 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.367  
1/1 [=====] - 0s 17ms/step  
epoch 2431 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.031  
1/1 [=====] - 0s 16ms/step  
epoch 2432 - batch 1/3, discriminator\_loss=0.002, generator\_loss=0.031  
1/1 [=====] - 0s 15ms/step  
epoch 2432 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.264  
1/1 [=====] - 0s 16ms/step  
epoch 2432 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.050  
1/1 [=====] - 0s 17ms/step  
epoch 2433 - batch 1/3, discriminator\_loss=0.012, generator\_loss=0.605  
1/1 [=====] - 0s 17ms/step  
epoch 2433 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.286  
1/1 [=====] - 0s 16ms/step  
epoch 2433 - batch 3/3, discriminator\_loss=0.008, generator\_loss=0.001  
1/1 [=====] - 0s 16ms/step  
epoch 2434 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.693  
1/1 [=====] - 0s 15ms/step  
epoch 2434 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.217  
1/1 [=====] - 0s 15ms/step  
epoch 2434 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.000  
1/1 [=====] - 0s 18ms/step  
epoch 2435 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.003  
1/1 [=====] - 0s 16ms/step  
epoch 2435 - batch 2/3, discriminator\_loss=0.176, generator\_loss=0.003  
1/1 [=====] - 0s 15ms/step  
epoch 2435 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.077  
1/1 [=====] - 0s 16ms/step  
epoch 2436 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.218  
1/1 [=====] - 0s 17ms/step  
epoch 2436 - batch 2/3, discriminator\_loss=0.111, generator\_loss=0.405  
1/1 [=====] - 0s 16ms/step  
epoch 2436 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.399  
1/1 [=====] - 0s 15ms/step  
epoch 2437 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.886  
1/1 [=====] - 0s 18ms/step  
epoch 2437 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.106  
1/1 [=====] - 0s 17ms/step  
epoch 2437 - batch 3/3, discriminator\_loss=0.000, generator\_loss=2.604  
1/1 [=====] - 0s 16ms/step  
epoch 2438 - batch 1/3, discriminator\_loss=0.000, generator\_loss=3.399  
1/1 [=====] - 0s 18ms/step  
epoch 2438 - batch 2/3, discriminator\_loss=0.011, generator\_loss=4.087  
1/1 [=====] - 0s 18ms/step  
epoch 2438 - batch 3/3, discriminator\_loss=0.001, generator\_loss=2.415  
1/1 [=====] - 0s 24ms/step  
epoch 2439 - batch 1/3, discriminator\_loss=0.024, generator\_loss=1.170  
1/1 [=====] - 0s 18ms/step

epoch 2439 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.417  
 1/1 [=====] - 0s 18ms/step  
 epoch 2439 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.713  
 1/1 [=====] - 0s 15ms/step  
 epoch 2440 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.045  
 1/1 [=====] - 0s 18ms/step  
 epoch 2440 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.549  
 1/1 [=====] - 0s 18ms/step  
 epoch 2440 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.623  
 1/1 [=====] - 0s 18ms/step  
 epoch 2441 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.987  
 1/1 [=====] - 0s 15ms/step  
 epoch 2441 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.989  
 1/1 [=====] - 0s 17ms/step  
 epoch 2441 - batch 3/3, discriminator\_loss=0.607, generator\_loss=0.623  
 4/4 [=====] - 0s 50ms/step  
 Accuracy réelle : 100%, fausse : 85%  
 1/1 [=====] - 0s 18ms/step  
 epoch 2442 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.410  
 1/1 [=====] - 0s 15ms/step  
 epoch 2442 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.842  
 1/1 [=====] - 0s 15ms/step  
 epoch 2442 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.182  
 1/1 [=====] - 0s 18ms/step  
 epoch 2443 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.895  
 1/1 [=====] - 0s 22ms/step  
 epoch 2443 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.315  
 1/1 [=====] - 0s 16ms/step  
 epoch 2443 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.220  
 1/1 [=====] - 0s 16ms/step  
 epoch 2444 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.483  
 1/1 [=====] - 0s 15ms/step  
 epoch 2444 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.718  
 1/1 [=====] - 0s 17ms/step  
 epoch 2444 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.153  
 1/1 [=====] - 0s 16ms/step  
 epoch 2445 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.230  
 1/1 [=====] - 0s 16ms/step  
 epoch 2445 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.949  
 1/1 [=====] - 0s 19ms/step  
 epoch 2445 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.605  
 1/1 [=====] - 0s 15ms/step  
 epoch 2446 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.032  
 1/1 [=====] - 0s 16ms/step  
 epoch 2446 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.193  
 1/1 [=====] - 0s 19ms/step  
 epoch 2446 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.663  
 1/1 [=====] - 0s 19ms/step



epoch 2447 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.263  
 1/1 [=====] - 0s 15ms/step  
 epoch 2447 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.013  
 1/1 [=====] - 0s 16ms/step  
 epoch 2447 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.959  
 1/1 [=====] - 0s 24ms/step  
 epoch 2448 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.464  
 1/1 [=====] - 0s 15ms/step  
 epoch 2448 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.286  
 1/1 [=====] - 0s 17ms/step  
 epoch 2448 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.171  
 1/1 [=====] - 0s 15ms/step  
 epoch 2449 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.491  
 1/1 [=====] - 0s 21ms/step  
 epoch 2449 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.994  
 1/1 [=====] - 0s 17ms/step  
 epoch 2449 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.255  
 1/1 [=====] - 0s 18ms/step  
 epoch 2450 - batch 1/3, discriminator\_loss=0.006, generator\_loss=0.541  
 1/1 [=====] - 0s 15ms/step  
 epoch 2450 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.978  
 1/1 [=====] - 0s 17ms/step  
 epoch 2450 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.189  
 1/1 [=====] - 0s 17ms/step  
 epoch 2451 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.161  
 1/1 [=====] - 0s 17ms/step  
 epoch 2451 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.116  
 1/1 [=====] - 0s 17ms/step  
 epoch 2451 - batch 3/3, discriminator\_loss=0.003, generator\_loss=0.910  
 1/1 [=====] - 0s 15ms/step  
 epoch 2452 - batch 1/3, discriminator\_loss=0.001, generator\_loss=0.776  
 1/1 [=====] - 0s 17ms/step  
 epoch 2452 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.991  
 1/1 [=====] - 0s 17ms/step  
 epoch 2452 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.115  
 1/1 [=====] - 0s 18ms/step  
 epoch 2453 - batch 1/3, discriminator\_loss=0.017, generator\_loss=1.933  
 1/1 [=====] - 0s 20ms/step  
 epoch 2453 - batch 2/3, discriminator\_loss=0.000, generator\_loss=2.427  
 1/1 [=====] - 0s 15ms/step  
 epoch 2453 - batch 3/3, discriminator\_loss=0.000, generator\_loss=3.963  
 1/1 [=====] - 0s 20ms/step  
 epoch 2454 - batch 1/3, discriminator\_loss=0.000, generator\_loss=3.826  
 1/1 [=====] - 0s 18ms/step  
 epoch 2454 - batch 2/3, discriminator\_loss=0.000, generator\_loss=4.296  
 1/1 [=====] - 0s 23ms/step  
 epoch 2454 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.705  
 1/1 [=====] - 0s 17ms/step

epoch 2455 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.558  
 1/1 [=====] - 0s 17ms/step  
 epoch 2455 - batch 2/3, discriminator\_loss=0.176, generator\_loss=2.898  
 1/1 [=====] - 0s 17ms/step  
 epoch 2455 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.538  
 1/1 [=====] - 0s 16ms/step  
 epoch 2456 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.963  
 1/1 [=====] - 0s 17ms/step  
 epoch 2456 - batch 2/3, discriminator\_loss=0.017, generator\_loss=1.164  
 1/1 [=====] - 0s 17ms/step  
 epoch 2456 - batch 3/3, discriminator\_loss=0.000, generator\_loss=1.139  
 1/1 [=====] - 0s 22ms/step  
 epoch 2457 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.272  
 1/1 [=====] - 0s 17ms/step  
 epoch 2457 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.034  
 1/1 [=====] - 0s 17ms/step  
 epoch 2457 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.617  
 1/1 [=====] - 0s 21ms/step  
 epoch 2458 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.063  
 1/1 [=====] - 0s 16ms/step  
 epoch 2458 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.470  
 1/1 [=====] - 0s 17ms/step  
 epoch 2458 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.193  
 1/1 [=====] - 0s 18ms/step  
 epoch 2459 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.401  
 1/1 [=====] - 0s 16ms/step  
 epoch 2459 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.241  
 1/1 [=====] - 0s 18ms/step  
 epoch 2459 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.680  
 1/1 [=====] - 0s 19ms/step  
 epoch 2460 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.469  
 1/1 [=====] - 0s 16ms/step  
 epoch 2460 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.272  
 1/1 [=====] - 0s 19ms/step  
 epoch 2460 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.436  
 1/1 [=====] - 0s 16ms/step  
 epoch 2461 - batch 1/3, discriminator\_loss=0.000, generator\_loss=0.298  
 1/1 [=====] - 0s 16ms/step  
 epoch 2461 - batch 2/3, discriminator\_loss=0.000, generator\_loss=0.667  
 1/1 [=====] - 0s 16ms/step  
 epoch 2461 - batch 3/3, discriminator\_loss=0.000, generator\_loss=0.416  
 4/4 [=====] - 0s 51ms/step  
 Accuracy réelle : 100%, fausse : 38%  
 1/1 [=====] - 0s 17ms/step  
 epoch 2462 - batch 1/3, discriminator\_loss=0.011, generator\_loss=1.150  
 1/1 [=====] - 0s 15ms/step  
 epoch 2462 - batch 2/3, discriminator\_loss=0.000, generator\_loss=1.184  
 1/1 [=====] - 0s 17ms/step

epoch 2462 - batch 3/3, discriminator\_loss=0.001, generator\_loss=2.940  
 1/1 [=====] - 0s 16ms/step  
 epoch 2463 - batch 1/3, discriminator\_loss=0.000, generator\_loss=1.904  
 1/1 [=====] - 0s 15ms/step  
 epoch 2463 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.264  
 1/1 [=====] - 0s 15ms/step  
 epoch 2463 - batch 3/3, discriminator\_loss=0.002, generator\_loss=3.185  
 1/1 [=====] - 0s 16ms/step  
 epoch 2464 - batch 1/3, discriminator\_loss=0.000, generator\_loss=3.994  
 1/1 [=====] - 0s 15ms/step  
 epoch 2464 - batch 2/3, discriminator\_loss=0.000, generator\_loss=3.934  
 1/1 [=====] - 0s 16ms/step  
 epoch 2464 - batch 3/3, discriminator\_loss=0.005, generator\_loss=4.515  
 1/1 [=====] - 0s 17ms/step  
 epoch 2465 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.149  
 1/1 [=====] - 0s 18ms/step  
 epoch 2465 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.166  
 1/1 [=====] - 0s 18ms/step  
 epoch 2465 - batch 3/3, discriminator\_loss=0.000, generator\_loss=5.657  
 1/1 [=====] - 0s 16ms/step  
 epoch 2466 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.368  
 1/1 [=====] - 0s 15ms/step  
 epoch 2466 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.055  
 1/1 [=====] - 0s 16ms/step  
 epoch 2466 - batch 3/3, discriminator\_loss=0.000, generator\_loss=6.920  
 1/1 [=====] - 0s 15ms/step  
 epoch 2467 - batch 1/3, discriminator\_loss=0.000, generator\_loss=7.206  
 1/1 [=====] - 0s 15ms/step  
 epoch 2467 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.637  
 1/1 [=====] - 0s 15ms/step  
 epoch 2467 - batch 3/3, discriminator\_loss=0.048, generator\_loss=7.877  
 1/1 [=====] - 0s 15ms/step  
 epoch 2468 - batch 1/3, discriminator\_loss=0.000, generator\_loss=6.806  
 1/1 [=====] - 0s 17ms/step  
 epoch 2468 - batch 2/3, discriminator\_loss=0.000, generator\_loss=6.228  
 1/1 [=====] - 0s 16ms/step  
 epoch 2468 - batch 3/3, discriminator\_loss=0.000, generator\_loss=4.086  
 1/1 [=====] - 0s 15ms/step  
 epoch 2469 - batch 1/3, discriminator\_loss=0.477, generator\_loss=6.323  
 1/1 [=====] - 0s 22ms/step  
 epoch 2469 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.286  
 1/1 [=====] - 0s 19ms/step  
 epoch 2469 - batch 3/3, discriminator\_loss=0.001, generator\_loss=11.024  
 1/1 [=====] - 0s 15ms/step  
 epoch 2470 - batch 1/3, discriminator\_loss=0.000, generator\_loss=11.508  
 1/1 [=====] - 0s 19ms/step  
 epoch 2470 - batch 2/3, discriminator\_loss=0.002, generator\_loss=14.211  
 1/1 [=====] - 0s 17ms/step

epoch 2470 - batch 3/3, discriminator\_loss=0.037, generator\_loss=14.353  
1/1 [=====] - 0s 15ms/step  
epoch 2471 - batch 1/3, discriminator\_loss=0.000, generator\_loss=17.120  
1/1 [=====] - 0s 16ms/step  
epoch 2471 - batch 2/3, discriminator\_loss=0.000, generator\_loss=18.472  
1/1 [=====] - 0s 18ms/step  
epoch 2471 - batch 3/3, discriminator\_loss=0.000, generator\_loss=20.773  
1/1 [=====] - 0s 18ms/step  
epoch 2472 - batch 1/3, discriminator\_loss=0.000, generator\_loss=21.804  
1/1 [=====] - 0s 16ms/step  
epoch 2472 - batch 2/3, discriminator\_loss=0.000, generator\_loss=21.957  
1/1 [=====] - 0s 15ms/step  
epoch 2472 - batch 3/3, discriminator\_loss=0.000, generator\_loss=21.314  
1/1 [=====] - 0s 16ms/step  
epoch 2473 - batch 1/3, discriminator\_loss=0.000, generator\_loss=23.872  
1/1 [=====] - 0s 16ms/step  
epoch 2473 - batch 2/3, discriminator\_loss=0.016, generator\_loss=21.601  
1/1 [=====] - 0s 16ms/step  
epoch 2473 - batch 3/3, discriminator\_loss=0.000, generator\_loss=22.928  
1/1 [=====] - 0s 16ms/step  
epoch 2474 - batch 1/3, discriminator\_loss=0.000, generator\_loss=19.559  
1/1 [=====] - 0s 17ms/step  
epoch 2474 - batch 2/3, discriminator\_loss=0.000, generator\_loss=19.260  
1/1 [=====] - 0s 15ms/step  
epoch 2474 - batch 3/3, discriminator\_loss=0.000, generator\_loss=19.496  
1/1 [=====] - 0s 16ms/step  
epoch 2475 - batch 1/3, discriminator\_loss=0.000, generator\_loss=18.574  
1/1 [=====] - 0s 18ms/step  
epoch 2475 - batch 2/3, discriminator\_loss=0.000, generator\_loss=19.128  
1/1 [=====] - 0s 15ms/step  
epoch 2475 - batch 3/3, discriminator\_loss=0.000, generator\_loss=17.247  
1/1 [=====] - 0s 17ms/step  
epoch 2476 - batch 1/3, discriminator\_loss=0.001, generator\_loss=17.144  
1/1 [=====] - 0s 15ms/step  
epoch 2476 - batch 2/3, discriminator\_loss=0.000, generator\_loss=15.424  
1/1 [=====] - 0s 18ms/step  
epoch 2476 - batch 3/3, discriminator\_loss=0.002, generator\_loss=15.112  
1/1 [=====] - 0s 16ms/step  
epoch 2477 - batch 1/3, discriminator\_loss=0.000, generator\_loss=15.241  
1/1 [=====] - 0s 16ms/step  
epoch 2477 - batch 2/3, discriminator\_loss=1.191, generator\_loss=14.200  
1/1 [=====] - 0s 17ms/step  
epoch 2477 - batch 3/3, discriminator\_loss=0.000, generator\_loss=11.369  
1/1 [=====] - 0s 16ms/step  
epoch 2478 - batch 1/3, discriminator\_loss=0.000, generator\_loss=9.340  
1/1 [=====] - 0s 17ms/step  
epoch 2478 - batch 2/3, discriminator\_loss=0.016, generator\_loss=10.438  
1/1 [=====] - 0s 16ms/step

```

epoch 2478 - batch 3/3, discriminator_loss=0.000, generator_loss=11.459
1/1 [=====] - 0s 16ms/step
epoch 2479 - batch 1/3, discriminator_loss=0.000, generator_loss=10.988
1/1 [=====] - 0s 16ms/step
epoch 2479 - batch 2/3, discriminator_loss=0.002, generator_loss=9.400
1/1 [=====] - 0s 16ms/step
epoch 2479 - batch 3/3, discriminator_loss=0.000, generator_loss=9.256
1/1 [=====] - 0s 16ms/step
epoch 2480 - batch 1/3, discriminator_loss=0.000, generator_loss=10.831
1/1 [=====] - 0s 16ms/step
epoch 2480 - batch 2/3, discriminator_loss=0.000, generator_loss=8.408
1/1 [=====] - 0s 16ms/step
epoch 2480 - batch 3/3, discriminator_loss=0.000, generator_loss=10.352
1/1 [=====] - 0s 16ms/step
epoch 2481 - batch 1/3, discriminator_loss=0.000, generator_loss=10.187
1/1 [=====] - 0s 17ms/step
epoch 2481 - batch 2/3, discriminator_loss=0.000, generator_loss=11.506
1/1 [=====] - 0s 19ms/step
epoch 2481 - batch 3/3, discriminator_loss=0.000, generator_loss=10.743
4/4 [=====] - 0s 51ms/step
Accuracy réelle : 100%, fausse : 99%
1/1 [=====] - 0s 19ms/step
epoch 2482 - batch 1/3, discriminator_loss=0.000, generator_loss=9.683
1/1 [=====] - 0s 17ms/step
epoch 2482 - batch 2/3, discriminator_loss=0.003, generator_loss=8.952
1/1 [=====] - 0s 15ms/step
epoch 2482 - batch 3/3, discriminator_loss=0.000, generator_loss=11.345
1/1 [=====] - 0s 23ms/step
epoch 2483 - batch 1/3, discriminator_loss=0.000, generator_loss=11.363
1/1 [=====] - 0s 16ms/step
epoch 2483 - batch 2/3, discriminator_loss=0.003, generator_loss=10.168
1/1 [=====] - 0s 19ms/step
epoch 2483 - batch 3/3, discriminator_loss=0.000, generator_loss=12.287
1/1 [=====] - 0s 18ms/step
epoch 2484 - batch 1/3, discriminator_loss=0.000, generator_loss=10.732
1/1 [=====] - 0s 15ms/step
epoch 2484 - batch 2/3, discriminator_loss=0.000, generator_loss=10.954
1/1 [=====] - 0s 16ms/step
epoch 2484 - batch 3/3, discriminator_loss=0.036, generator_loss=14.043
1/1 [=====] - 0s 17ms/step
epoch 2485 - batch 1/3, discriminator_loss=0.083, generator_loss=21.884
1/1 [=====] - 0s 17ms/step
epoch 2485 - batch 2/3, discriminator_loss=0.000, generator_loss=26.534
1/1 [=====] - 0s 16ms/step
epoch 2485 - batch 3/3, discriminator_loss=0.010, generator_loss=32.023
1/1 [=====] - 0s 16ms/step
epoch 2486 - batch 1/3, discriminator_loss=0.000, generator_loss=34.344
1/1 [=====] - 0s 19ms/step

```

epoch 2486 - batch 2/3, discriminator\_loss=0.004, generator\_loss=36.050  
1/1 [=====] - 0s 20ms/step  
epoch 2486 - batch 3/3, discriminator\_loss=0.000, generator\_loss=37.014  
1/1 [=====] - 0s 16ms/step  
epoch 2487 - batch 1/3, discriminator\_loss=0.103, generator\_loss=37.745  
1/1 [=====] - 0s 16ms/step  
epoch 2487 - batch 2/3, discriminator\_loss=0.009, generator\_loss=32.066  
1/1 [=====] - 0s 18ms/step  
epoch 2487 - batch 3/3, discriminator\_loss=0.135, generator\_loss=29.048  
1/1 [=====] - 0s 18ms/step  
epoch 2488 - batch 1/3, discriminator\_loss=0.000, generator\_loss=24.388  
1/1 [=====] - 0s 15ms/step  
epoch 2488 - batch 2/3, discriminator\_loss=0.000, generator\_loss=19.746  
1/1 [=====] - 0s 16ms/step  
epoch 2488 - batch 3/3, discriminator\_loss=0.000, generator\_loss=16.911  
1/1 [=====] - 0s 19ms/step  
epoch 2489 - batch 1/3, discriminator\_loss=0.000, generator\_loss=13.203  
1/1 [=====] - 0s 16ms/step  
epoch 2489 - batch 2/3, discriminator\_loss=0.000, generator\_loss=8.713  
1/1 [=====] - 0s 17ms/step  
epoch 2489 - batch 3/3, discriminator\_loss=0.000, generator\_loss=8.959  
1/1 [=====] - 0s 18ms/step  
epoch 2490 - batch 1/3, discriminator\_loss=0.000, generator\_loss=5.075  
1/1 [=====] - 0s 16ms/step  
epoch 2490 - batch 2/3, discriminator\_loss=0.000, generator\_loss=5.316  
1/1 [=====] - 0s 19ms/step  
epoch 2490 - batch 3/3, discriminator\_loss=0.062, generator\_loss=8.078  
1/1 [=====] - 0s 18ms/step  
epoch 2491 - batch 1/3, discriminator\_loss=0.002, generator\_loss=9.805  
1/1 [=====] - 0s 19ms/step  
epoch 2491 - batch 2/3, discriminator\_loss=0.000, generator\_loss=12.245  
1/1 [=====] - 0s 15ms/step  
epoch 2491 - batch 3/3, discriminator\_loss=0.000, generator\_loss=14.856  
1/1 [=====] - 0s 15ms/step  
epoch 2492 - batch 1/3, discriminator\_loss=0.000, generator\_loss=15.009  
1/1 [=====] - 0s 15ms/step  
epoch 2492 - batch 2/3, discriminator\_loss=0.000, generator\_loss=15.911  
1/1 [=====] - 0s 15ms/step  
epoch 2492 - batch 3/3, discriminator\_loss=0.000, generator\_loss=17.555  
1/1 [=====] - 0s 16ms/step  
epoch 2493 - batch 1/3, discriminator\_loss=0.000, generator\_loss=21.480  
1/1 [=====] - 0s 15ms/step  
epoch 2493 - batch 2/3, discriminator\_loss=0.000, generator\_loss=21.197  
1/1 [=====] - 0s 16ms/step  
epoch 2493 - batch 3/3, discriminator\_loss=0.000, generator\_loss=24.151  
1/1 [=====] - 0s 16ms/step  
epoch 2494 - batch 1/3, discriminator\_loss=0.000, generator\_loss=23.176  
1/1 [=====] - 0s 15ms/step

```

epoch 2494 - batch 2/3, discriminator_loss=0.000, generator_loss=25.105
1/1 [=====] - 0s 20ms/step
epoch 2494 - batch 3/3, discriminator_loss=0.000, generator_loss=25.017
1/1 [=====] - 0s 18ms/step
epoch 2495 - batch 1/3, discriminator_loss=0.000, generator_loss=25.699
1/1 [=====] - 0s 20ms/step
epoch 2495 - batch 2/3, discriminator_loss=0.000, generator_loss=26.742
1/1 [=====] - 0s 17ms/step
epoch 2495 - batch 3/3, discriminator_loss=0.000, generator_loss=26.398
1/1 [=====] - 0s 17ms/step
epoch 2496 - batch 1/3, discriminator_loss=0.000, generator_loss=26.678
1/1 [=====] - 0s 17ms/step
epoch 2496 - batch 2/3, discriminator_loss=0.000, generator_loss=29.003
1/1 [=====] - 0s 18ms/step
epoch 2496 - batch 3/3, discriminator_loss=0.000, generator_loss=26.972
1/1 [=====] - 0s 17ms/step
epoch 2497 - batch 1/3, discriminator_loss=0.000, generator_loss=26.029
1/1 [=====] - 0s 15ms/step
epoch 2497 - batch 2/3, discriminator_loss=0.000, generator_loss=24.178
1/1 [=====] - 0s 24ms/step
epoch 2497 - batch 3/3, discriminator_loss=0.000, generator_loss=27.621
1/1 [=====] - 0s 22ms/step
epoch 2498 - batch 1/3, discriminator_loss=0.000, generator_loss=25.516
1/1 [=====] - 0s 24ms/step
epoch 2498 - batch 2/3, discriminator_loss=0.000, generator_loss=28.860
1/1 [=====] - 0s 25ms/step
epoch 2498 - batch 3/3, discriminator_loss=0.000, generator_loss=27.414
1/1 [=====] - 0s 32ms/step
epoch 2499 - batch 1/3, discriminator_loss=0.000, generator_loss=26.552
1/1 [=====] - 0s 27ms/step
epoch 2499 - batch 2/3, discriminator_loss=0.000, generator_loss=27.066
1/1 [=====] - 0s 24ms/step
epoch 2499 - batch 3/3, discriminator_loss=0.000, generator_loss=25.368
1/1 [=====] - 0s 23ms/step
epoch 2500 - batch 1/3, discriminator_loss=0.000, generator_loss=27.671
1/1 [=====] - 0s 16ms/step
epoch 2500 - batch 2/3, discriminator_loss=0.000, generator_loss=25.872
1/1 [=====] - 0s 15ms/step
epoch 2500 - batch 3/3, discriminator_loss=0.000, generator_loss=26.041

```

```

[ ]: epochs=3000
    batchsize=10
    model = train(generator_model, discriminator_model, gan_model, dataset,
        ↪latent_dim, epochs, batchsize)

```

Le flux de sortie a été tronqué et ne contient que les 5000 dernières lignes.

```

1/1 [=====] - 0s 21ms/step
epoch 2752 - batch 3/10, discriminator_loss=0.421, generator_loss=12.172

```

```

1/1 [=====] - 0s 19ms/step
epoch 2752 - batch 4/10, discriminator_loss=0.002, generator_loss=16.327
1/1 [=====] - 0s 22ms/step
epoch 2752 - batch 5/10, discriminator_loss=0.000, generator_loss=19.843
1/1 [=====] - 0s 16ms/step
epoch 2752 - batch 6/10, discriminator_loss=0.000, generator_loss=22.107
1/1 [=====] - 0s 24ms/step
epoch 2752 - batch 7/10, discriminator_loss=0.000, generator_loss=23.195
1/1 [=====] - 0s 17ms/step
epoch 2752 - batch 8/10, discriminator_loss=0.459, generator_loss=26.264
1/1 [=====] - 0s 16ms/step
epoch 2752 - batch 9/10, discriminator_loss=0.255, generator_loss=24.308
1/1 [=====] - 0s 23ms/step
epoch 2752 - batch 10/10, discriminator_loss=0.258, generator_loss=21.447
1/1 [=====] - 0s 22ms/step
epoch 2753 - batch 1/10, discriminator_loss=0.000, generator_loss=18.273
1/1 [=====] - 0s 17ms/step
epoch 2753 - batch 2/10, discriminator_loss=0.000, generator_loss=18.601
1/1 [=====] - 0s 16ms/step
epoch 2753 - batch 3/10, discriminator_loss=0.002, generator_loss=18.600
1/1 [=====] - 0s 18ms/step
epoch 2753 - batch 4/10, discriminator_loss=0.106, generator_loss=19.769
1/1 [=====] - 0s 17ms/step
epoch 2753 - batch 5/10, discriminator_loss=0.019, generator_loss=24.844
1/1 [=====] - 0s 17ms/step
epoch 2753 - batch 6/10, discriminator_loss=0.000, generator_loss=30.780
1/1 [=====] - 0s 17ms/step
epoch 2753 - batch 7/10, discriminator_loss=0.005, generator_loss=33.716
1/1 [=====] - 0s 21ms/step
epoch 2753 - batch 8/10, discriminator_loss=0.000, generator_loss=35.186
1/1 [=====] - 0s 17ms/step
epoch 2753 - batch 9/10, discriminator_loss=0.000, generator_loss=36.964
1/1 [=====] - 0s 17ms/step
epoch 2753 - batch 10/10, discriminator_loss=0.000, generator_loss=37.932
1/1 [=====] - 0s 21ms/step
epoch 2754 - batch 1/10, discriminator_loss=0.000, generator_loss=39.802
1/1 [=====] - 0s 19ms/step
epoch 2754 - batch 2/10, discriminator_loss=0.023, generator_loss=40.488
1/1 [=====] - 0s 24ms/step
epoch 2754 - batch 3/10, discriminator_loss=0.000, generator_loss=41.271
1/1 [=====] - 0s 21ms/step
epoch 2754 - batch 4/10, discriminator_loss=0.000, generator_loss=40.913
1/1 [=====] - 0s 24ms/step
epoch 2754 - batch 5/10, discriminator_loss=0.000, generator_loss=40.535
1/1 [=====] - 0s 15ms/step
epoch 2754 - batch 6/10, discriminator_loss=0.000, generator_loss=39.950
1/1 [=====] - 0s 17ms/step
epoch 2754 - batch 7/10, discriminator_loss=0.000, generator_loss=41.212

```



```

1/1 [=====] - 0s 18ms/step
epoch 2754 - batch 8/10, discriminator_loss=0.000, generator_loss=39.288
1/1 [=====] - 0s 16ms/step
epoch 2754 - batch 9/10, discriminator_loss=0.000, generator_loss=39.373
1/1 [=====] - 0s 16ms/step
epoch 2754 - batch 10/10, discriminator_loss=0.000, generator_loss=37.849
1/1 [=====] - 0s 27ms/step
epoch 2755 - batch 1/10, discriminator_loss=1.320, generator_loss=36.185
1/1 [=====] - 0s 27ms/step
epoch 2755 - batch 2/10, discriminator_loss=0.000, generator_loss=32.012
1/1 [=====] - 0s 23ms/step
epoch 2755 - batch 3/10, discriminator_loss=0.000, generator_loss=29.296
1/1 [=====] - 0s 22ms/step
epoch 2755 - batch 4/10, discriminator_loss=0.000, generator_loss=28.154
1/1 [=====] - 0s 20ms/step
epoch 2755 - batch 5/10, discriminator_loss=1.569, generator_loss=24.673
1/1 [=====] - 0s 17ms/step
epoch 2755 - batch 6/10, discriminator_loss=0.000, generator_loss=24.023
1/1 [=====] - 0s 17ms/step
epoch 2755 - batch 7/10, discriminator_loss=0.000, generator_loss=18.645
1/1 [=====] - 0s 22ms/step
epoch 2755 - batch 8/10, discriminator_loss=0.000, generator_loss=17.237
1/1 [=====] - 0s 27ms/step
epoch 2755 - batch 9/10, discriminator_loss=0.000, generator_loss=13.740
1/1 [=====] - 0s 23ms/step
epoch 2755 - batch 10/10, discriminator_loss=0.001, generator_loss=15.347
1/1 [=====] - 0s 20ms/step
epoch 2756 - batch 1/10, discriminator_loss=0.000, generator_loss=11.465
1/1 [=====] - 0s 21ms/step
epoch 2756 - batch 2/10, discriminator_loss=0.013, generator_loss=9.181
1/1 [=====] - 0s 23ms/step
epoch 2756 - batch 3/10, discriminator_loss=0.000, generator_loss=8.884
1/1 [=====] - 0s 28ms/step
epoch 2756 - batch 4/10, discriminator_loss=0.009, generator_loss=7.555
1/1 [=====] - 0s 21ms/step
epoch 2756 - batch 5/10, discriminator_loss=1.382, generator_loss=9.698
1/1 [=====] - 0s 28ms/step
epoch 2756 - batch 6/10, discriminator_loss=0.726, generator_loss=10.640
1/1 [=====] - 0s 21ms/step
epoch 2756 - batch 7/10, discriminator_loss=0.421, generator_loss=13.319
1/1 [=====] - 0s 18ms/step
epoch 2756 - batch 8/10, discriminator_loss=0.000, generator_loss=13.959
1/1 [=====] - 0s 17ms/step
epoch 2756 - batch 9/10, discriminator_loss=0.000, generator_loss=17.407
1/1 [=====] - 0s 16ms/step
epoch 2756 - batch 10/10, discriminator_loss=0.000, generator_loss=19.141
1/1 [=====] - 0s 20ms/step
epoch 2757 - batch 1/10, discriminator_loss=0.000, generator_loss=20.338

```

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1/1 [=====] - 0s 19ms/step
epoch 2757 - batch 2/10, discriminator_loss=1.071, generator_loss=21.988
1/1 [=====] - 0s 24ms/step
epoch 2757 - batch 3/10, discriminator_loss=0.000, generator_loss=18.809
1/1 [=====] - 0s 22ms/step
epoch 2757 - batch 4/10, discriminator_loss=0.000, generator_loss=19.019
1/1 [=====] - 0s 25ms/step
epoch 2757 - batch 5/10, discriminator_loss=0.000, generator_loss=18.595
1/1 [=====] - 0s 20ms/step
epoch 2757 - batch 6/10, discriminator_loss=0.000, generator_loss=18.176
1/1 [=====] - 0s 22ms/step
epoch 2757 - batch 7/10, discriminator_loss=0.000, generator_loss=15.936
1/1 [=====] - 0s 23ms/step
epoch 2757 - batch 8/10, discriminator_loss=0.000, generator_loss=15.907
1/1 [=====] - 0s 17ms/step
epoch 2757 - batch 9/10, discriminator_loss=0.784, generator_loss=13.915
1/1 [=====] - 0s 21ms/step
epoch 2757 - batch 10/10, discriminator_loss=0.000, generator_loss=10.970
1/1 [=====] - 0s 21ms/step
epoch 2758 - batch 1/10, discriminator_loss=0.000, generator_loss=10.147
1/1 [=====] - 0s 24ms/step
epoch 2758 - batch 2/10, discriminator_loss=0.000, generator_loss=7.175
1/1 [=====] - 0s 22ms/step
epoch 2758 - batch 3/10, discriminator_loss=0.000, generator_loss=6.720
1/1 [=====] - 0s 26ms/step
epoch 2758 - batch 4/10, discriminator_loss=0.000, generator_loss=5.368
1/1 [=====] - 0s 22ms/step
epoch 2758 - batch 5/10, discriminator_loss=0.000, generator_loss=2.610
1/1 [=====] - 0s 24ms/step
epoch 2758 - batch 6/10, discriminator_loss=1.502, generator_loss=0.941
1/1 [=====] - 0s 23ms/step
epoch 2758 - batch 7/10, discriminator_loss=0.000, generator_loss=0.241
1/1 [=====] - 0s 36ms/step
epoch 2758 - batch 8/10, discriminator_loss=0.000, generator_loss=0.252
1/1 [=====] - 0s 24ms/step
epoch 2758 - batch 9/10, discriminator_loss=0.000, generator_loss=0.021
1/1 [=====] - 0s 22ms/step
epoch 2758 - batch 10/10, discriminator_loss=0.491, generator_loss=0.002
1/1 [=====] - 0s 31ms/step
epoch 2759 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2759 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2759 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2759 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 30ms/step
epoch 2759 - batch 5/10, discriminator_loss=0.153, generator_loss=0.000

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1/1 [=====] - 0s 18ms/step
epoch 2759 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2759 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2759 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 26ms/step
epoch 2759 - batch 9/10, discriminator_loss=0.000, generator_loss=0.159
1/1 [=====] - 0s 30ms/step
epoch 2759 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 28ms/step
epoch 2760 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2760 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2760 - batch 3/10, discriminator_loss=0.007, generator_loss=0.001
1/1 [=====] - 0s 16ms/step
epoch 2760 - batch 4/10, discriminator_loss=0.003, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2760 - batch 5/10, discriminator_loss=0.003, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2760 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 25ms/step
epoch 2760 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2760 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2760 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2760 - batch 10/10, discriminator_loss=0.001, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2761 - batch 1/10, discriminator_loss=0.002, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2761 - batch 2/10, discriminator_loss=0.000, generator_loss=0.003
1/1 [=====] - 0s 24ms/step
epoch 2761 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2761 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 25ms/step
epoch 2761 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2761 - batch 6/10, discriminator_loss=0.001, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2761 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2761 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 28ms/step
epoch 2761 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 18ms/step
epoch 2761 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
4/4 [=====] - 0s 53ms/step
Accuracy réelle : 100%, fausse : 1%
1/1 [=====] - 0s 20ms/step
epoch 2762 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2762 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2762 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2762 - batch 4/10, discriminator_loss=0.012, generator_loss=0.001
1/1 [=====] - 0s 21ms/step
epoch 2762 - batch 5/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 22ms/step
epoch 2762 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2762 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2762 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2762 - batch 9/10, discriminator_loss=0.000, generator_loss=0.376
1/1 [=====] - 0s 17ms/step
epoch 2762 - batch 10/10, discriminator_loss=0.000, generator_loss=0.006
1/1 [=====] - 0s 24ms/step
epoch 2763 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2763 - batch 2/10, discriminator_loss=0.000, generator_loss=0.011
1/1 [=====] - 0s 27ms/step
epoch 2763 - batch 3/10, discriminator_loss=0.000, generator_loss=0.009
1/1 [=====] - 0s 25ms/step
epoch 2763 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2763 - batch 5/10, discriminator_loss=0.000, generator_loss=0.026
1/1 [=====] - 0s 16ms/step
epoch 2763 - batch 6/10, discriminator_loss=0.000, generator_loss=0.078
1/1 [=====] - 0s 18ms/step
epoch 2763 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2763 - batch 8/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 17ms/step
epoch 2763 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2763 - batch 10/10, discriminator_loss=0.003, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2764 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2764 - batch 2/10, discriminator_loss=0.000, generator_loss=0.031

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1/1 [=====] - 0s 17ms/step
epoch 2764 - batch 3/10, discriminator_loss=0.000, generator_loss=0.043
1/1 [=====] - 0s 21ms/step
epoch 2764 - batch 4/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 17ms/step
epoch 2764 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2764 - batch 6/10, discriminator_loss=0.000, generator_loss=0.053
1/1 [=====] - 0s 19ms/step
epoch 2764 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 29ms/step
epoch 2764 - batch 8/10, discriminator_loss=0.000, generator_loss=0.130
1/1 [=====] - 0s 24ms/step
epoch 2764 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2764 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2765 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2765 - batch 2/10, discriminator_loss=0.000, generator_loss=0.033
1/1 [=====] - 0s 23ms/step
epoch 2765 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2765 - batch 4/10, discriminator_loss=0.000, generator_loss=0.013
1/1 [=====] - 0s 18ms/step
epoch 2765 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2765 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 26ms/step
epoch 2765 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 25ms/step
epoch 2765 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2765 - batch 9/10, discriminator_loss=0.000, generator_loss=0.098
1/1 [=====] - 0s 22ms/step
epoch 2765 - batch 10/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 24ms/step
epoch 2766 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 25ms/step
epoch 2766 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2766 - batch 3/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 23ms/step
epoch 2766 - batch 4/10, discriminator_loss=0.000, generator_loss=0.007
1/1 [=====] - 0s 21ms/step
epoch 2766 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2766 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 22ms/step
epoch 2766 - batch 7/10, discriminator_loss=0.000, generator_loss=0.033
1/1 [=====] - 0s 25ms/step
epoch 2766 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2766 - batch 9/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 24ms/step
epoch 2766 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2767 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2767 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2767 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2767 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2767 - batch 5/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 17ms/step
epoch 2767 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2767 - batch 7/10, discriminator_loss=0.000, generator_loss=0.008
1/1 [=====] - 0s 17ms/step
epoch 2767 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 35ms/step
epoch 2767 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2767 - batch 10/10, discriminator_loss=0.000, generator_loss=0.004
1/1 [=====] - 0s 20ms/step
epoch 2768 - batch 1/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 16ms/step
epoch 2768 - batch 2/10, discriminator_loss=0.000, generator_loss=0.021
1/1 [=====] - 0s 16ms/step
epoch 2768 - batch 3/10, discriminator_loss=0.000, generator_loss=0.024
1/1 [=====] - 0s 23ms/step
epoch 2768 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2768 - batch 5/10, discriminator_loss=0.001, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2768 - batch 6/10, discriminator_loss=0.000, generator_loss=0.119
1/1 [=====] - 0s 17ms/step
epoch 2768 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2768 - batch 8/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 24ms/step
epoch 2768 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2768 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 16ms/step
epoch 2769 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2769 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2769 - batch 3/10, discriminator_loss=0.035, generator_loss=0.002
1/1 [=====] - 0s 17ms/step
epoch 2769 - batch 4/10, discriminator_loss=0.000, generator_loss=1.158
1/1 [=====] - 0s 18ms/step
epoch 2769 - batch 5/10, discriminator_loss=0.000, generator_loss=0.059
1/1 [=====] - 0s 18ms/step
epoch 2769 - batch 6/10, discriminator_loss=0.000, generator_loss=0.083
1/1 [=====] - 0s 24ms/step
epoch 2769 - batch 7/10, discriminator_loss=0.000, generator_loss=0.050
1/1 [=====] - 0s 21ms/step
epoch 2769 - batch 8/10, discriminator_loss=0.000, generator_loss=3.067
1/1 [=====] - 0s 21ms/step
epoch 2769 - batch 9/10, discriminator_loss=0.000, generator_loss=0.998
1/1 [=====] - 0s 22ms/step
epoch 2769 - batch 10/10, discriminator_loss=0.000, generator_loss=1.466
1/1 [=====] - 0s 21ms/step
epoch 2770 - batch 1/10, discriminator_loss=0.000, generator_loss=0.339
1/1 [=====] - 0s 26ms/step
epoch 2770 - batch 2/10, discriminator_loss=0.000, generator_loss=0.265
1/1 [=====] - 0s 23ms/step
epoch 2770 - batch 3/10, discriminator_loss=0.000, generator_loss=0.331
1/1 [=====] - 0s 21ms/step
epoch 2770 - batch 4/10, discriminator_loss=0.000, generator_loss=0.717
1/1 [=====] - 0s 20ms/step
epoch 2770 - batch 5/10, discriminator_loss=0.000, generator_loss=0.736
1/1 [=====] - 0s 25ms/step
epoch 2770 - batch 6/10, discriminator_loss=0.001, generator_loss=0.035
1/1 [=====] - 0s 23ms/step
epoch 2770 - batch 7/10, discriminator_loss=0.000, generator_loss=0.127
1/1 [=====] - 0s 16ms/step
epoch 2770 - batch 8/10, discriminator_loss=0.000, generator_loss=0.104
1/1 [=====] - 0s 17ms/step
epoch 2770 - batch 9/10, discriminator_loss=0.000, generator_loss=0.326
1/1 [=====] - 0s 19ms/step
epoch 2770 - batch 10/10, discriminator_loss=0.000, generator_loss=0.009
1/1 [=====] - 0s 16ms/step
epoch 2771 - batch 1/10, discriminator_loss=0.000, generator_loss=0.062
1/1 [=====] - 0s 25ms/step
epoch 2771 - batch 2/10, discriminator_loss=0.000, generator_loss=0.149
1/1 [=====] - 0s 18ms/step
epoch 2771 - batch 3/10, discriminator_loss=0.000, generator_loss=0.262
1/1 [=====] - 0s 16ms/step
epoch 2771 - batch 4/10, discriminator_loss=0.000, generator_loss=0.209

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1/1 [=====] - 0s 26ms/step
epoch 2771 - batch 5/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 23ms/step
epoch 2771 - batch 6/10, discriminator_loss=0.000, generator_loss=0.004
1/1 [=====] - 0s 17ms/step
epoch 2771 - batch 7/10, discriminator_loss=0.000, generator_loss=0.170
1/1 [=====] - 0s 17ms/step
epoch 2771 - batch 8/10, discriminator_loss=0.000, generator_loss=0.038
1/1 [=====] - 0s 17ms/step
epoch 2771 - batch 9/10, discriminator_loss=0.000, generator_loss=0.051
1/1 [=====] - 0s 17ms/step
epoch 2771 - batch 10/10, discriminator_loss=0.000, generator_loss=0.393
1/1 [=====] - 0s 18ms/step
epoch 2772 - batch 1/10, discriminator_loss=0.000, generator_loss=0.010
1/1 [=====] - 0s 23ms/step
epoch 2772 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2772 - batch 3/10, discriminator_loss=0.000, generator_loss=0.150
1/1 [=====] - 0s 17ms/step
epoch 2772 - batch 4/10, discriminator_loss=0.000, generator_loss=0.008
1/1 [=====] - 0s 17ms/step
epoch 2772 - batch 5/10, discriminator_loss=0.000, generator_loss=0.446
1/1 [=====] - 0s 20ms/step
epoch 2772 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2772 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 26ms/step
epoch 2772 - batch 8/10, discriminator_loss=0.000, generator_loss=0.011
1/1 [=====] - 0s 23ms/step
epoch 2772 - batch 9/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 19ms/step
epoch 2772 - batch 10/10, discriminator_loss=0.477, generator_loss=4.479
1/1 [=====] - 0s 16ms/step
epoch 2773 - batch 1/10, discriminator_loss=0.000, generator_loss=7.977
1/1 [=====] - 0s 16ms/step
epoch 2773 - batch 2/10, discriminator_loss=0.000, generator_loss=6.729
1/1 [=====] - 0s 19ms/step
epoch 2773 - batch 3/10, discriminator_loss=0.000, generator_loss=3.094
1/1 [=====] - 0s 17ms/step
epoch 2773 - batch 4/10, discriminator_loss=1.082, generator_loss=0.114
1/1 [=====] - 0s 17ms/step
epoch 2773 - batch 5/10, discriminator_loss=0.124, generator_loss=0.105
1/1 [=====] - 0s 19ms/step
epoch 2773 - batch 6/10, discriminator_loss=0.000, generator_loss=0.131
1/1 [=====] - 0s 24ms/step
epoch 2773 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2773 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 19ms/step
epoch 2773 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2773 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2774 - batch 1/10, discriminator_loss=0.000, generator_loss=0.003
1/1 [=====] - 0s 23ms/step
epoch 2774 - batch 2/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 17ms/step
epoch 2774 - batch 3/10, discriminator_loss=0.000, generator_loss=0.443
1/1 [=====] - 0s 23ms/step
epoch 2774 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2774 - batch 5/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 24ms/step
epoch 2774 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2774 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2774 - batch 8/10, discriminator_loss=0.000, generator_loss=0.045
1/1 [=====] - 0s 15ms/step
epoch 2774 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2774 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2775 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2775 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2775 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2775 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2775 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2775 - batch 6/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 23ms/step
epoch 2775 - batch 7/10, discriminator_loss=0.000, generator_loss=0.009
1/1 [=====] - 0s 22ms/step
epoch 2775 - batch 8/10, discriminator_loss=0.000, generator_loss=1.329
1/1 [=====] - 0s 16ms/step
epoch 2775 - batch 9/10, discriminator_loss=0.000, generator_loss=0.554
1/1 [=====] - 0s 20ms/step
epoch 2775 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 15ms/step
epoch 2776 - batch 1/10, discriminator_loss=0.000, generator_loss=0.006
1/1 [=====] - 0s 18ms/step
epoch 2776 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 25ms/step
epoch 2776 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2776 - batch 4/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 21ms/step
epoch 2776 - batch 5/10, discriminator_loss=0.000, generator_loss=0.007
1/1 [=====] - 0s 21ms/step
epoch 2776 - batch 6/10, discriminator_loss=0.000, generator_loss=0.003
1/1 [=====] - 0s 16ms/step
epoch 2776 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2776 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2776 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2776 - batch 10/10, discriminator_loss=0.000, generator_loss=0.182
1/1 [=====] - 0s 27ms/step
epoch 2777 - batch 1/10, discriminator_loss=0.094, generator_loss=0.437
1/1 [=====] - 0s 17ms/step
epoch 2777 - batch 2/10, discriminator_loss=0.000, generator_loss=0.803
1/1 [=====] - 0s 16ms/step
epoch 2777 - batch 3/10, discriminator_loss=0.000, generator_loss=0.058
1/1 [=====] - 0s 18ms/step
epoch 2777 - batch 4/10, discriminator_loss=0.000, generator_loss=0.130
1/1 [=====] - 0s 16ms/step
epoch 2777 - batch 5/10, discriminator_loss=0.000, generator_loss=0.565
1/1 [=====] - 0s 16ms/step
epoch 2777 - batch 6/10, discriminator_loss=0.000, generator_loss=0.626
1/1 [=====] - 0s 16ms/step
epoch 2777 - batch 7/10, discriminator_loss=0.000, generator_loss=0.777
1/1 [=====] - 0s 16ms/step
epoch 2777 - batch 8/10, discriminator_loss=0.000, generator_loss=0.472
1/1 [=====] - 0s 16ms/step
epoch 2777 - batch 9/10, discriminator_loss=0.000, generator_loss=1.396
1/1 [=====] - 0s 22ms/step
epoch 2777 - batch 10/10, discriminator_loss=0.000, generator_loss=0.325
1/1 [=====] - 0s 21ms/step
epoch 2778 - batch 1/10, discriminator_loss=0.000, generator_loss=0.766
1/1 [=====] - 0s 23ms/step
epoch 2778 - batch 2/10, discriminator_loss=0.000, generator_loss=0.072
1/1 [=====] - 0s 17ms/step
epoch 2778 - batch 3/10, discriminator_loss=0.000, generator_loss=0.012
1/1 [=====] - 0s 17ms/step
epoch 2778 - batch 4/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 17ms/step
epoch 2778 - batch 5/10, discriminator_loss=0.000, generator_loss=0.019
1/1 [=====] - 0s 23ms/step
epoch 2778 - batch 6/10, discriminator_loss=0.000, generator_loss=0.337

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1/1 [=====] - 0s 23ms/step
epoch 2778 - batch 7/10, discriminator_loss=0.000, generator_loss=0.046
1/1 [=====] - 0s 20ms/step
epoch 2778 - batch 8/10, discriminator_loss=0.000, generator_loss=0.092
1/1 [=====] - 0s 24ms/step
epoch 2778 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 31ms/step
epoch 2778 - batch 10/10, discriminator_loss=0.000, generator_loss=0.003
1/1 [=====] - 0s 33ms/step
epoch 2779 - batch 1/10, discriminator_loss=0.000, generator_loss=0.432
1/1 [=====] - 0s 20ms/step
epoch 2779 - batch 2/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 26ms/step
epoch 2779 - batch 3/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 22ms/step
epoch 2779 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2779 - batch 5/10, discriminator_loss=0.000, generator_loss=0.070
1/1 [=====] - 0s 17ms/step
epoch 2779 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2779 - batch 7/10, discriminator_loss=0.000, generator_loss=0.530
1/1 [=====] - 0s 30ms/step
epoch 2779 - batch 8/10, discriminator_loss=0.000, generator_loss=0.042
1/1 [=====] - 0s 21ms/step
epoch 2779 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2779 - batch 10/10, discriminator_loss=0.000, generator_loss=0.006
1/1 [=====] - 0s 25ms/step
epoch 2780 - batch 1/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 22ms/step
epoch 2780 - batch 2/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 18ms/step
epoch 2780 - batch 3/10, discriminator_loss=0.000, generator_loss=0.018
1/1 [=====] - 0s 26ms/step
epoch 2780 - batch 4/10, discriminator_loss=0.000, generator_loss=0.015
1/1 [=====] - 0s 21ms/step
epoch 2780 - batch 5/10, discriminator_loss=0.000, generator_loss=0.004
1/1 [=====] - 0s 35ms/step
epoch 2780 - batch 6/10, discriminator_loss=0.000, generator_loss=0.089
1/1 [=====] - 0s 16ms/step
epoch 2780 - batch 7/10, discriminator_loss=0.000, generator_loss=0.019
1/1 [=====] - 0s 16ms/step
epoch 2780 - batch 8/10, discriminator_loss=0.000, generator_loss=0.066
1/1 [=====] - 0s 16ms/step
epoch 2780 - batch 9/10, discriminator_loss=0.000, generator_loss=0.004
1/1 [=====] - 0s 18ms/step
epoch 2780 - batch 10/10, discriminator_loss=0.000, generator_loss=0.058

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1/1 [=====] - 0s 24ms/step
epoch 2781 - batch 1/10, discriminator_loss=0.000, generator_loss=0.018
1/1 [=====] - 0s 24ms/step
epoch 2781 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2781 - batch 3/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 17ms/step
epoch 2781 - batch 4/10, discriminator_loss=0.000, generator_loss=0.006
1/1 [=====] - 0s 17ms/step
epoch 2781 - batch 5/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 22ms/step
epoch 2781 - batch 6/10, discriminator_loss=0.000, generator_loss=0.003
1/1 [=====] - 0s 23ms/step
epoch 2781 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 25ms/step
epoch 2781 - batch 8/10, discriminator_loss=0.000, generator_loss=0.064
1/1 [=====] - 0s 26ms/step
epoch 2781 - batch 9/10, discriminator_loss=0.000, generator_loss=0.076
1/1 [=====] - 0s 18ms/step
epoch 2781 - batch 10/10, discriminator_loss=0.000, generator_loss=0.412
4/4 [=====] - 0s 53ms/step
Accuracy réelle : 100%, fausse : 100%
1/1 [=====] - 0s 19ms/step
epoch 2782 - batch 1/10, discriminator_loss=0.000, generator_loss=0.013
1/1 [=====] - 0s 25ms/step
epoch 2782 - batch 2/10, discriminator_loss=0.000, generator_loss=0.611
1/1 [=====] - 0s 16ms/step
epoch 2782 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2782 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2782 - batch 5/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 17ms/step
epoch 2782 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2782 - batch 7/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 17ms/step
epoch 2782 - batch 8/10, discriminator_loss=0.000, generator_loss=0.140
1/1 [=====] - 0s 35ms/step
epoch 2782 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2782 - batch 10/10, discriminator_loss=0.000, generator_loss=0.005
1/1 [=====] - 0s 22ms/step
epoch 2783 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2783 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2783 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 23ms/step
epoch 2783 - batch 4/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 23ms/step
epoch 2783 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 25ms/step
epoch 2783 - batch 6/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 22ms/step
epoch 2783 - batch 7/10, discriminator_loss=0.000, generator_loss=0.003
1/1 [=====] - 0s 20ms/step
epoch 2783 - batch 8/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 25ms/step
epoch 2783 - batch 9/10, discriminator_loss=0.000, generator_loss=0.003
1/1 [=====] - 0s 22ms/step
epoch 2783 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2784 - batch 1/10, discriminator_loss=0.000, generator_loss=0.084
1/1 [=====] - 0s 25ms/step
epoch 2784 - batch 2/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 18ms/step
epoch 2784 - batch 3/10, discriminator_loss=0.000, generator_loss=0.009
1/1 [=====] - 0s 28ms/step
epoch 2784 - batch 4/10, discriminator_loss=0.000, generator_loss=0.012
1/1 [=====] - 0s 18ms/step
epoch 2784 - batch 5/10, discriminator_loss=0.000, generator_loss=0.226
1/1 [=====] - 0s 17ms/step
epoch 2784 - batch 6/10, discriminator_loss=0.000, generator_loss=0.005
1/1 [=====] - 0s 17ms/step
epoch 2784 - batch 7/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 19ms/step
epoch 2784 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2784 - batch 9/10, discriminator_loss=0.000, generator_loss=0.019
1/1 [=====] - 0s 19ms/step
epoch 2784 - batch 10/10, discriminator_loss=0.000, generator_loss=0.041
1/1 [=====] - 0s 25ms/step
epoch 2785 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2785 - batch 2/10, discriminator_loss=0.000, generator_loss=0.034
1/1 [=====] - 0s 17ms/step
epoch 2785 - batch 3/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 19ms/step
epoch 2785 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2785 - batch 5/10, discriminator_loss=0.000, generator_loss=0.017
1/1 [=====] - 0s 17ms/step
epoch 2785 - batch 6/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 16ms/step
epoch 2785 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 16ms/step
epoch 2785 - batch 8/10, discriminator_loss=0.000, generator_loss=0.212
1/1 [=====] - 0s 19ms/step
epoch 2785 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 27ms/step
epoch 2785 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2786 - batch 1/10, discriminator_loss=0.000, generator_loss=0.013
1/1 [=====] - 0s 21ms/step
epoch 2786 - batch 2/10, discriminator_loss=0.001, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2786 - batch 3/10, discriminator_loss=0.000, generator_loss=0.623
1/1 [=====] - 0s 17ms/step
epoch 2786 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2786 - batch 5/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 19ms/step
epoch 2786 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2786 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2786 - batch 8/10, discriminator_loss=0.000, generator_loss=0.029
1/1 [=====] - 0s 18ms/step
epoch 2786 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2786 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2787 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2787 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2787 - batch 3/10, discriminator_loss=0.190, generator_loss=0.012
1/1 [=====] - 0s 25ms/step
epoch 2787 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2787 - batch 5/10, discriminator_loss=0.000, generator_loss=0.037
1/1 [=====] - 0s 16ms/step
epoch 2787 - batch 6/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 16ms/step
epoch 2787 - batch 7/10, discriminator_loss=0.000, generator_loss=0.003
1/1 [=====] - 0s 17ms/step
epoch 2787 - batch 8/10, discriminator_loss=0.000, generator_loss=0.003
1/1 [=====] - 0s 18ms/step
epoch 2787 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 25ms/step
epoch 2787 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2788 - batch 1/10, discriminator_loss=0.000, generator_loss=0.001

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1/1 [=====] - 0s 20ms/step
epoch 2788 - batch 2/10, discriminator_loss=0.000, generator_loss=0.031
1/1 [=====] - 0s 17ms/step
epoch 2788 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2788 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2788 - batch 5/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 17ms/step
epoch 2788 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2788 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2788 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2788 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2788 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 28ms/step
epoch 2789 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2789 - batch 2/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 23ms/step
epoch 2789 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 27ms/step
epoch 2789 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2789 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2789 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2789 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2789 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2789 - batch 9/10, discriminator_loss=0.000, generator_loss=0.179
1/1 [=====] - 0s 25ms/step
epoch 2789 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 25ms/step
epoch 2790 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 25ms/step
epoch 2790 - batch 2/10, discriminator_loss=0.284, generator_loss=0.278
1/1 [=====] - 0s 24ms/step
epoch 2790 - batch 3/10, discriminator_loss=0.000, generator_loss=3.200
1/1 [=====] - 0s 16ms/step
epoch 2790 - batch 4/10, discriminator_loss=0.000, generator_loss=0.754
1/1 [=====] - 0s 21ms/step
epoch 2790 - batch 5/10, discriminator_loss=0.000, generator_loss=1.478

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1/1 [=====] - 0s 22ms/step
epoch 2790 - batch 6/10, discriminator_loss=0.001, generator_loss=0.015
1/1 [=====] - 0s 22ms/step
epoch 2790 - batch 7/10, discriminator_loss=0.000, generator_loss=0.157
1/1 [=====] - 0s 19ms/step
epoch 2790 - batch 8/10, discriminator_loss=0.000, generator_loss=0.663
1/1 [=====] - 0s 18ms/step
epoch 2790 - batch 9/10, discriminator_loss=0.000, generator_loss=3.801
1/1 [=====] - 0s 22ms/step
epoch 2790 - batch 10/10, discriminator_loss=0.000, generator_loss=1.420
1/1 [=====] - 0s 28ms/step
epoch 2791 - batch 1/10, discriminator_loss=0.000, generator_loss=1.800
1/1 [=====] - 0s 18ms/step
epoch 2791 - batch 2/10, discriminator_loss=0.000, generator_loss=0.577
1/1 [=====] - 0s 22ms/step
epoch 2791 - batch 3/10, discriminator_loss=0.678, generator_loss=0.157
1/1 [=====] - 0s 21ms/step
epoch 2791 - batch 4/10, discriminator_loss=0.000, generator_loss=0.010
1/1 [=====] - 0s 18ms/step
epoch 2791 - batch 5/10, discriminator_loss=0.000, generator_loss=0.506
1/1 [=====] - 0s 17ms/step
epoch 2791 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2791 - batch 7/10, discriminator_loss=0.006, generator_loss=0.006
1/1 [=====] - 0s 18ms/step
epoch 2791 - batch 8/10, discriminator_loss=0.000, generator_loss=0.107
1/1 [=====] - 0s 16ms/step
epoch 2791 - batch 9/10, discriminator_loss=0.046, generator_loss=0.148
1/1 [=====] - 0s 18ms/step
epoch 2791 - batch 10/10, discriminator_loss=0.000, generator_loss=0.290
1/1 [=====] - 0s 22ms/step
epoch 2792 - batch 1/10, discriminator_loss=0.000, generator_loss=0.254
1/1 [=====] - 0s 18ms/step
epoch 2792 - batch 2/10, discriminator_loss=0.002, generator_loss=0.433
1/1 [=====] - 0s 18ms/step
epoch 2792 - batch 3/10, discriminator_loss=0.406, generator_loss=0.249
1/1 [=====] - 0s 25ms/step
epoch 2792 - batch 4/10, discriminator_loss=0.001, generator_loss=0.012
1/1 [=====] - 0s 22ms/step
epoch 2792 - batch 5/10, discriminator_loss=0.001, generator_loss=0.114
1/1 [=====] - 0s 17ms/step
epoch 2792 - batch 6/10, discriminator_loss=0.002, generator_loss=0.014
1/1 [=====] - 0s 22ms/step
epoch 2792 - batch 7/10, discriminator_loss=0.004, generator_loss=0.235
1/1 [=====] - 0s 19ms/step
epoch 2792 - batch 8/10, discriminator_loss=0.001, generator_loss=0.034
1/1 [=====] - 0s 27ms/step
epoch 2792 - batch 9/10, discriminator_loss=0.001, generator_loss=0.062

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1/1 [=====] - 0s 22ms/step
epoch 2792 - batch 10/10, discriminator_loss=0.002, generator_loss=0.146
1/1 [=====] - 0s 23ms/step
epoch 2793 - batch 1/10, discriminator_loss=0.005, generator_loss=0.058
1/1 [=====] - 0s 19ms/step
epoch 2793 - batch 2/10, discriminator_loss=0.004, generator_loss=0.054
1/1 [=====] - 0s 20ms/step
epoch 2793 - batch 3/10, discriminator_loss=0.004, generator_loss=0.035
1/1 [=====] - 0s 23ms/step
epoch 2793 - batch 4/10, discriminator_loss=0.004, generator_loss=0.072
1/1 [=====] - 0s 20ms/step
epoch 2793 - batch 5/10, discriminator_loss=0.002, generator_loss=0.230
1/1 [=====] - 0s 16ms/step
epoch 2793 - batch 6/10, discriminator_loss=0.008, generator_loss=0.185
1/1 [=====] - 0s 20ms/step
epoch 2793 - batch 7/10, discriminator_loss=0.003, generator_loss=0.135
1/1 [=====] - 0s 21ms/step
epoch 2793 - batch 8/10, discriminator_loss=0.001, generator_loss=0.363
1/1 [=====] - 0s 19ms/step
epoch 2793 - batch 9/10, discriminator_loss=0.001, generator_loss=0.228
1/1 [=====] - 0s 18ms/step
epoch 2793 - batch 10/10, discriminator_loss=0.007, generator_loss=0.171
1/1 [=====] - 0s 22ms/step
epoch 2794 - batch 1/10, discriminator_loss=0.001, generator_loss=0.277
1/1 [=====] - 0s 25ms/step
epoch 2794 - batch 2/10, discriminator_loss=0.000, generator_loss=0.141
1/1 [=====] - 0s 25ms/step
epoch 2794 - batch 3/10, discriminator_loss=0.004, generator_loss=0.497
1/1 [=====] - 0s 17ms/step
epoch 2794 - batch 4/10, discriminator_loss=0.001, generator_loss=0.128
1/1 [=====] - 0s 19ms/step
epoch 2794 - batch 5/10, discriminator_loss=0.037, generator_loss=0.050
1/1 [=====] - 0s 18ms/step
epoch 2794 - batch 6/10, discriminator_loss=0.001, generator_loss=0.307
1/1 [=====] - 0s 16ms/step
epoch 2794 - batch 7/10, discriminator_loss=0.000, generator_loss=0.262
1/1 [=====] - 0s 17ms/step
epoch 2794 - batch 8/10, discriminator_loss=0.001, generator_loss=0.824
1/1 [=====] - 0s 16ms/step
epoch 2794 - batch 9/10, discriminator_loss=0.000, generator_loss=0.650
1/1 [=====] - 0s 22ms/step
epoch 2794 - batch 10/10, discriminator_loss=0.000, generator_loss=0.461
1/1 [=====] - 0s 20ms/step
epoch 2795 - batch 1/10, discriminator_loss=0.000, generator_loss=1.006
1/1 [=====] - 0s 21ms/step
epoch 2795 - batch 2/10, discriminator_loss=0.002, generator_loss=0.865
1/1 [=====] - 0s 16ms/step
epoch 2795 - batch 3/10, discriminator_loss=0.000, generator_loss=0.615

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1/1 [=====] - 0s 17ms/step
epoch 2795 - batch 4/10, discriminator_loss=0.001, generator_loss=1.106
1/1 [=====] - 0s 27ms/step
epoch 2795 - batch 5/10, discriminator_loss=0.001, generator_loss=0.614
1/1 [=====] - 0s 18ms/step
epoch 2795 - batch 6/10, discriminator_loss=0.000, generator_loss=1.726
1/1 [=====] - 0s 19ms/step
epoch 2795 - batch 7/10, discriminator_loss=0.001, generator_loss=1.311
1/1 [=====] - 0s 20ms/step
epoch 2795 - batch 8/10, discriminator_loss=0.001, generator_loss=1.109
1/1 [=====] - 0s 19ms/step
epoch 2795 - batch 9/10, discriminator_loss=0.000, generator_loss=1.006
1/1 [=====] - 0s 18ms/step
epoch 2795 - batch 10/10, discriminator_loss=0.004, generator_loss=1.405
1/1 [=====] - 0s 23ms/step
epoch 2796 - batch 1/10, discriminator_loss=0.001, generator_loss=1.828
1/1 [=====] - 0s 19ms/step
epoch 2796 - batch 2/10, discriminator_loss=0.000, generator_loss=2.218
1/1 [=====] - 0s 22ms/step
epoch 2796 - batch 3/10, discriminator_loss=0.000, generator_loss=2.248
1/1 [=====] - 0s 16ms/step
epoch 2796 - batch 4/10, discriminator_loss=0.000, generator_loss=3.006
1/1 [=====] - 0s 16ms/step
epoch 2796 - batch 5/10, discriminator_loss=0.000, generator_loss=2.163
1/1 [=====] - 0s 17ms/step
epoch 2796 - batch 6/10, discriminator_loss=0.000, generator_loss=5.254
1/1 [=====] - 0s 18ms/step
epoch 2796 - batch 7/10, discriminator_loss=0.000, generator_loss=4.206
1/1 [=====] - 0s 17ms/step
epoch 2796 - batch 8/10, discriminator_loss=0.000, generator_loss=2.426
1/1 [=====] - 0s 19ms/step
epoch 2796 - batch 9/10, discriminator_loss=0.000, generator_loss=2.201
1/1 [=====] - 0s 17ms/step
epoch 2796 - batch 10/10, discriminator_loss=0.000, generator_loss=2.281
1/1 [=====] - 0s 23ms/step
epoch 2797 - batch 1/10, discriminator_loss=0.010, generator_loss=1.915
1/1 [=====] - 0s 22ms/step
epoch 2797 - batch 2/10, discriminator_loss=0.000, generator_loss=0.558
1/1 [=====] - 0s 18ms/step
epoch 2797 - batch 3/10, discriminator_loss=0.012, generator_loss=0.289
1/1 [=====] - 0s 17ms/step
epoch 2797 - batch 4/10, discriminator_loss=0.000, generator_loss=1.012
1/1 [=====] - 0s 17ms/step
epoch 2797 - batch 5/10, discriminator_loss=0.000, generator_loss=1.157
1/1 [=====] - 0s 20ms/step
epoch 2797 - batch 6/10, discriminator_loss=0.000, generator_loss=1.480
1/1 [=====] - 0s 18ms/step
epoch 2797 - batch 7/10, discriminator_loss=0.000, generator_loss=1.287

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1/1 [=====] - 0s 21ms/step
epoch 2797 - batch 8/10, discriminator_loss=0.000, generator_loss=0.151
1/1 [=====] - 0s 21ms/step
epoch 2797 - batch 9/10, discriminator_loss=0.000, generator_loss=0.941
1/1 [=====] - 0s 21ms/step
epoch 2797 - batch 10/10, discriminator_loss=0.000, generator_loss=2.109
1/1 [=====] - 0s 24ms/step
epoch 2798 - batch 1/10, discriminator_loss=0.000, generator_loss=1.525
1/1 [=====] - 0s 21ms/step
epoch 2798 - batch 2/10, discriminator_loss=0.000, generator_loss=0.603
1/1 [=====] - 0s 21ms/step
epoch 2798 - batch 3/10, discriminator_loss=0.000, generator_loss=1.627
1/1 [=====] - 0s 19ms/step
epoch 2798 - batch 4/10, discriminator_loss=0.000, generator_loss=0.379
1/1 [=====] - 0s 25ms/step
epoch 2798 - batch 5/10, discriminator_loss=0.000, generator_loss=0.727
1/1 [=====] - 0s 24ms/step
epoch 2798 - batch 6/10, discriminator_loss=0.000, generator_loss=1.623
1/1 [=====] - 0s 31ms/step
epoch 2798 - batch 7/10, discriminator_loss=0.000, generator_loss=1.238
1/1 [=====] - 0s 17ms/step
epoch 2798 - batch 8/10, discriminator_loss=0.000, generator_loss=1.476
1/1 [=====] - 0s 29ms/step
epoch 2798 - batch 9/10, discriminator_loss=0.000, generator_loss=3.181
1/1 [=====] - 0s 18ms/step
epoch 2798 - batch 10/10, discriminator_loss=0.000, generator_loss=1.861
1/1 [=====] - 0s 21ms/step
epoch 2799 - batch 1/10, discriminator_loss=0.000, generator_loss=0.882
1/1 [=====] - 0s 24ms/step
epoch 2799 - batch 2/10, discriminator_loss=0.000, generator_loss=3.666
1/1 [=====] - 0s 23ms/step
epoch 2799 - batch 3/10, discriminator_loss=0.000, generator_loss=3.711
1/1 [=====] - 0s 25ms/step
epoch 2799 - batch 4/10, discriminator_loss=0.000, generator_loss=0.884
1/1 [=====] - 0s 23ms/step
epoch 2799 - batch 5/10, discriminator_loss=0.000, generator_loss=3.447
1/1 [=====] - 0s 19ms/step
epoch 2799 - batch 6/10, discriminator_loss=0.000, generator_loss=1.619
1/1 [=====] - 0s 22ms/step
epoch 2799 - batch 7/10, discriminator_loss=0.000, generator_loss=4.220
1/1 [=====] - 0s 22ms/step
epoch 2799 - batch 8/10, discriminator_loss=0.000, generator_loss=2.987
1/1 [=====] - 0s 24ms/step
epoch 2799 - batch 9/10, discriminator_loss=0.000, generator_loss=2.938
1/1 [=====] - 0s 23ms/step
epoch 2799 - batch 10/10, discriminator_loss=0.000, generator_loss=1.707
1/1 [=====] - 0s 23ms/step
epoch 2800 - batch 1/10, discriminator_loss=0.000, generator_loss=1.215

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1/1 [=====] - 0s 21ms/step
epoch 2800 - batch 2/10, discriminator_loss=0.000, generator_loss=4.107
1/1 [=====] - 0s 18ms/step
epoch 2800 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2800 - batch 4/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 17ms/step
epoch 2800 - batch 5/10, discriminator_loss=0.000, generator_loss=0.006
1/1 [=====] - 0s 18ms/step
epoch 2800 - batch 6/10, discriminator_loss=0.000, generator_loss=0.725
1/1 [=====] - 0s 20ms/step
epoch 2800 - batch 7/10, discriminator_loss=0.000, generator_loss=5.234
1/1 [=====] - 0s 24ms/step
epoch 2800 - batch 8/10, discriminator_loss=0.000, generator_loss=2.604
1/1 [=====] - 0s 17ms/step
epoch 2800 - batch 9/10, discriminator_loss=0.574, generator_loss=22.382
1/1 [=====] - 0s 16ms/step
epoch 2800 - batch 10/10, discriminator_loss=0.851, generator_loss=9.812
1/1 [=====] - 0s 16ms/step
epoch 2801 - batch 1/10, discriminator_loss=0.000, generator_loss=2.913
1/1 [=====] - 0s 16ms/step
epoch 2801 - batch 2/10, discriminator_loss=0.003, generator_loss=7.950
1/1 [=====] - 0s 18ms/step
epoch 2801 - batch 3/10, discriminator_loss=0.000, generator_loss=20.714
1/1 [=====] - 0s 26ms/step
epoch 2801 - batch 4/10, discriminator_loss=0.000, generator_loss=19.084
1/1 [=====] - 0s 18ms/step
epoch 2801 - batch 5/10, discriminator_loss=0.000, generator_loss=17.615
1/1 [=====] - 0s 18ms/step
epoch 2801 - batch 6/10, discriminator_loss=0.070, generator_loss=15.892
1/1 [=====] - 0s 19ms/step
epoch 2801 - batch 7/10, discriminator_loss=0.000, generator_loss=15.925
1/1 [=====] - 0s 18ms/step
epoch 2801 - batch 8/10, discriminator_loss=0.000, generator_loss=7.745
1/1 [=====] - 0s 19ms/step
epoch 2801 - batch 9/10, discriminator_loss=0.000, generator_loss=8.852
1/1 [=====] - 0s 20ms/step
epoch 2801 - batch 10/10, discriminator_loss=0.000, generator_loss=4.590
4/4 [=====] - 0s 55ms/step
Accuracy réelle : 100%, fausse : 60%
1/1 [=====] - 0s 17ms/step
epoch 2802 - batch 1/10, discriminator_loss=0.000, generator_loss=3.014
1/1 [=====] - 0s 26ms/step
epoch 2802 - batch 2/10, discriminator_loss=0.000, generator_loss=0.013
1/1 [=====] - 0s 29ms/step
epoch 2802 - batch 3/10, discriminator_loss=0.000, generator_loss=2.549
1/1 [=====] - 0s 22ms/step
epoch 2802 - batch 4/10, discriminator_loss=0.000, generator_loss=3.862

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1/1 [=====] - 0s 18ms/step
epoch 2802 - batch 5/10, discriminator_loss=0.002, generator_loss=0.172
1/1 [=====] - 0s 26ms/step
epoch 2802 - batch 6/10, discriminator_loss=0.124, generator_loss=1.585
1/1 [=====] - 0s 24ms/step
epoch 2802 - batch 7/10, discriminator_loss=0.000, generator_loss=1.480
1/1 [=====] - 0s 26ms/step
epoch 2802 - batch 8/10, discriminator_loss=0.000, generator_loss=2.280
1/1 [=====] - 0s 18ms/step
epoch 2802 - batch 9/10, discriminator_loss=0.000, generator_loss=1.040
1/1 [=====] - 0s 21ms/step
epoch 2802 - batch 10/10, discriminator_loss=0.000, generator_loss=2.084
1/1 [=====] - 0s 22ms/step
epoch 2803 - batch 1/10, discriminator_loss=0.000, generator_loss=4.033
1/1 [=====] - 0s 16ms/step
epoch 2803 - batch 2/10, discriminator_loss=0.000, generator_loss=3.938
1/1 [=====] - 0s 15ms/step
epoch 2803 - batch 3/10, discriminator_loss=0.000, generator_loss=6.117
1/1 [=====] - 0s 18ms/step
epoch 2803 - batch 4/10, discriminator_loss=0.000, generator_loss=1.767
1/1 [=====] - 0s 18ms/step
epoch 2803 - batch 5/10, discriminator_loss=0.000, generator_loss=1.658
1/1 [=====] - 0s 23ms/step
epoch 2803 - batch 6/10, discriminator_loss=0.000, generator_loss=3.218
1/1 [=====] - 0s 18ms/step
epoch 2803 - batch 7/10, discriminator_loss=0.000, generator_loss=2.108
1/1 [=====] - 0s 25ms/step
epoch 2803 - batch 8/10, discriminator_loss=0.000, generator_loss=2.845
1/1 [=====] - 0s 20ms/step
epoch 2803 - batch 9/10, discriminator_loss=0.000, generator_loss=1.116
1/1 [=====] - 0s 17ms/step
epoch 2803 - batch 10/10, discriminator_loss=0.003, generator_loss=1.670
1/1 [=====] - 0s 21ms/step
epoch 2804 - batch 1/10, discriminator_loss=0.000, generator_loss=0.445
1/1 [=====] - 0s 20ms/step
epoch 2804 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2804 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 30ms/step
epoch 2804 - batch 4/10, discriminator_loss=0.385, generator_loss=0.003
1/1 [=====] - 0s 19ms/step
epoch 2804 - batch 5/10, discriminator_loss=1.289, generator_loss=4.865
1/1 [=====] - 0s 22ms/step
epoch 2804 - batch 6/10, discriminator_loss=0.000, generator_loss=14.425
1/1 [=====] - 0s 20ms/step
epoch 2804 - batch 7/10, discriminator_loss=0.000, generator_loss=24.081
1/1 [=====] - 0s 22ms/step
epoch 2804 - batch 8/10, discriminator_loss=0.000, generator_loss=11.666

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1/1 [=====] - 0s 17ms/step
epoch 2804 - batch 9/10, discriminator_loss=0.000, generator_loss=3.194
1/1 [=====] - 0s 18ms/step
epoch 2804 - batch 10/10, discriminator_loss=1.208, generator_loss=0.000
1/1 [=====] - 0s 26ms/step
epoch 2805 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2805 - batch 2/10, discriminator_loss=0.000, generator_loss=1.045
1/1 [=====] - 0s 28ms/step
epoch 2805 - batch 3/10, discriminator_loss=0.812, generator_loss=6.589
1/1 [=====] - 0s 26ms/step
epoch 2805 - batch 4/10, discriminator_loss=0.000, generator_loss=1.807
1/1 [=====] - 0s 20ms/step
epoch 2805 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2805 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2805 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2805 - batch 8/10, discriminator_loss=0.132, generator_loss=4.177
1/1 [=====] - 0s 20ms/step
epoch 2805 - batch 9/10, discriminator_loss=0.000, generator_loss=0.004
1/1 [=====] - 0s 23ms/step
epoch 2805 - batch 10/10, discriminator_loss=0.000, generator_loss=3.390
1/1 [=====] - 0s 17ms/step
epoch 2806 - batch 1/10, discriminator_loss=0.000, generator_loss=0.080
1/1 [=====] - 0s 22ms/step
epoch 2806 - batch 2/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 27ms/step
epoch 2806 - batch 3/10, discriminator_loss=0.001, generator_loss=1.467
1/1 [=====] - 0s 17ms/step
epoch 2806 - batch 4/10, discriminator_loss=1.412, generator_loss=2.449
1/1 [=====] - 0s 18ms/step
epoch 2806 - batch 5/10, discriminator_loss=0.000, generator_loss=1.388
1/1 [=====] - 0s 17ms/step
epoch 2806 - batch 6/10, discriminator_loss=0.000, generator_loss=4.040
1/1 [=====] - 0s 17ms/step
epoch 2806 - batch 7/10, discriminator_loss=0.000, generator_loss=0.635
1/1 [=====] - 0s 26ms/step
epoch 2806 - batch 8/10, discriminator_loss=0.000, generator_loss=0.519
1/1 [=====] - 0s 21ms/step
epoch 2806 - batch 9/10, discriminator_loss=0.526, generator_loss=15.355
1/1 [=====] - 0s 22ms/step
epoch 2806 - batch 10/10, discriminator_loss=0.000, generator_loss=27.760
1/1 [=====] - 0s 23ms/step
epoch 2807 - batch 1/10, discriminator_loss=0.000, generator_loss=35.570
1/1 [=====] - 0s 23ms/step
epoch 2807 - batch 2/10, discriminator_loss=0.000, generator_loss=27.682

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1/1 [=====] - 0s 21ms/step
epoch 2807 - batch 3/10, discriminator_loss=0.000, generator_loss=24.910
1/1 [=====] - 0s 19ms/step
epoch 2807 - batch 4/10, discriminator_loss=0.000, generator_loss=18.937
1/1 [=====] - 0s 24ms/step
epoch 2807 - batch 5/10, discriminator_loss=0.000, generator_loss=13.384
1/1 [=====] - 0s 17ms/step
epoch 2807 - batch 6/10, discriminator_loss=0.000, generator_loss=10.226
1/1 [=====] - 0s 17ms/step
epoch 2807 - batch 7/10, discriminator_loss=0.000, generator_loss=12.895
1/1 [=====] - 0s 23ms/step
epoch 2807 - batch 8/10, discriminator_loss=0.000, generator_loss=7.893
1/1 [=====] - 0s 19ms/step
epoch 2807 - batch 9/10, discriminator_loss=0.000, generator_loss=4.221
1/1 [=====] - 0s 29ms/step
epoch 2807 - batch 10/10, discriminator_loss=0.000, generator_loss=2.270
1/1 [=====] - 0s 25ms/step
epoch 2808 - batch 1/10, discriminator_loss=0.000, generator_loss=2.511
1/1 [=====] - 0s 21ms/step
epoch 2808 - batch 2/10, discriminator_loss=0.000, generator_loss=3.059
1/1 [=====] - 0s 17ms/step
epoch 2808 - batch 3/10, discriminator_loss=0.000, generator_loss=0.875
1/1 [=====] - 0s 17ms/step
epoch 2808 - batch 4/10, discriminator_loss=0.000, generator_loss=3.256
1/1 [=====] - 0s 21ms/step
epoch 2808 - batch 5/10, discriminator_loss=0.000, generator_loss=2.721
1/1 [=====] - 0s 17ms/step
epoch 2808 - batch 6/10, discriminator_loss=0.000, generator_loss=1.294
1/1 [=====] - 0s 16ms/step
epoch 2808 - batch 7/10, discriminator_loss=0.000, generator_loss=0.093
1/1 [=====] - 0s 16ms/step
epoch 2808 - batch 8/10, discriminator_loss=0.000, generator_loss=0.245
1/1 [=====] - 0s 16ms/step
epoch 2808 - batch 9/10, discriminator_loss=0.000, generator_loss=2.539
1/1 [=====] - 0s 24ms/step
epoch 2808 - batch 10/10, discriminator_loss=0.000, generator_loss=0.468
1/1 [=====] - 0s 17ms/step
epoch 2809 - batch 1/10, discriminator_loss=0.000, generator_loss=0.136
1/1 [=====] - 0s 23ms/step
epoch 2809 - batch 2/10, discriminator_loss=0.000, generator_loss=0.005
1/1 [=====] - 0s 24ms/step
epoch 2809 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2809 - batch 4/10, discriminator_loss=0.000, generator_loss=1.500
1/1 [=====] - 0s 21ms/step
epoch 2809 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 27ms/step
epoch 2809 - batch 6/10, discriminator_loss=0.000, generator_loss=0.736

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1/1 [=====] - 0s 23ms/step
epoch 2809 - batch 7/10, discriminator_loss=0.000, generator_loss=1.417
1/1 [=====] - 0s 22ms/step
epoch 2809 - batch 8/10, discriminator_loss=0.000, generator_loss=0.185
1/1 [=====] - 0s 23ms/step
epoch 2809 - batch 9/10, discriminator_loss=0.000, generator_loss=2.274
1/1 [=====] - 0s 22ms/step
epoch 2809 - batch 10/10, discriminator_loss=0.000, generator_loss=0.222
1/1 [=====] - 0s 24ms/step
epoch 2810 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2810 - batch 2/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 19ms/step
epoch 2810 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2810 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2810 - batch 5/10, discriminator_loss=0.001, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2810 - batch 6/10, discriminator_loss=0.000, generator_loss=0.004
1/1 [=====] - 0s 19ms/step
epoch 2810 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2810 - batch 8/10, discriminator_loss=1.047, generator_loss=0.000
1/1 [=====] - 0s 26ms/step
epoch 2810 - batch 9/10, discriminator_loss=0.000, generator_loss=0.285
1/1 [=====] - 0s 23ms/step
epoch 2810 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2811 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2811 - batch 2/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 24ms/step
epoch 2811 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2811 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2811 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2811 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2811 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2811 - batch 8/10, discriminator_loss=0.000, generator_loss=0.218
1/1 [=====] - 0s 16ms/step
epoch 2811 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2811 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 19ms/step
epoch 2812 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2812 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2812 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2812 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2812 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2812 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2812 - batch 7/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 17ms/step
epoch 2812 - batch 8/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 17ms/step
epoch 2812 - batch 9/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 17ms/step
epoch 2812 - batch 10/10, discriminator_loss=0.000, generator_loss=0.170
1/1 [=====] - 0s 18ms/step
epoch 2813 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2813 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2813 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2813 - batch 4/10, discriminator_loss=0.000, generator_loss=0.533
1/1 [=====] - 0s 17ms/step
epoch 2813 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2813 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2813 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2813 - batch 8/10, discriminator_loss=0.000, generator_loss=0.078
1/1 [=====] - 0s 20ms/step
epoch 2813 - batch 9/10, discriminator_loss=0.000, generator_loss=0.013
1/1 [=====] - 0s 22ms/step
epoch 2813 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2814 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 27ms/step
epoch 2814 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2814 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2814 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 19ms/step
epoch 2814 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2814 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2814 - batch 7/10, discriminator_loss=0.000, generator_loss=0.003
1/1 [=====] - 0s 20ms/step
epoch 2814 - batch 8/10, discriminator_loss=0.000, generator_loss=0.013
1/1 [=====] - 0s 26ms/step
epoch 2814 - batch 9/10, discriminator_loss=0.000, generator_loss=0.007
1/1 [=====] - 0s 18ms/step
epoch 2814 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2815 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 30ms/step
epoch 2815 - batch 2/10, discriminator_loss=0.000, generator_loss=0.975
1/1 [=====] - 0s 23ms/step
epoch 2815 - batch 3/10, discriminator_loss=0.000, generator_loss=0.040
1/1 [=====] - 0s 18ms/step
epoch 2815 - batch 4/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 19ms/step
epoch 2815 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2815 - batch 6/10, discriminator_loss=0.000, generator_loss=0.114
1/1 [=====] - 0s 18ms/step
epoch 2815 - batch 7/10, discriminator_loss=0.000, generator_loss=0.078
1/1 [=====] - 0s 20ms/step
epoch 2815 - batch 8/10, discriminator_loss=0.000, generator_loss=0.181
1/1 [=====] - 0s 23ms/step
epoch 2815 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2815 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2816 - batch 1/10, discriminator_loss=0.000, generator_loss=0.362
1/1 [=====] - 0s 24ms/step
epoch 2816 - batch 2/10, discriminator_loss=0.000, generator_loss=0.156
1/1 [=====] - 0s 17ms/step
epoch 2816 - batch 3/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 17ms/step
epoch 2816 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2816 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2816 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2816 - batch 7/10, discriminator_loss=0.000, generator_loss=0.446
1/1 [=====] - 0s 19ms/step
epoch 2816 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 23ms/step
epoch 2816 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2816 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2817 - batch 1/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 22ms/step
epoch 2817 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2817 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2817 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2817 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2817 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2817 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2817 - batch 8/10, discriminator_loss=0.000, generator_loss=0.015
1/1 [=====] - 0s 17ms/step
epoch 2817 - batch 9/10, discriminator_loss=0.000, generator_loss=0.011
1/1 [=====] - 0s 17ms/step
epoch 2817 - batch 10/10, discriminator_loss=0.000, generator_loss=0.071
1/1 [=====] - 0s 16ms/step
epoch 2818 - batch 1/10, discriminator_loss=0.000, generator_loss=0.777
1/1 [=====] - 0s 17ms/step
epoch 2818 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2818 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2818 - batch 4/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 16ms/step
epoch 2818 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2818 - batch 6/10, discriminator_loss=0.000, generator_loss=0.487
1/1 [=====] - 0s 19ms/step
epoch 2818 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2818 - batch 8/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 17ms/step
epoch 2818 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2818 - batch 10/10, discriminator_loss=0.000, generator_loss=0.004
1/1 [=====] - 0s 19ms/step
epoch 2819 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2819 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 22ms/step
epoch 2819 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2819 - batch 4/10, discriminator_loss=0.000, generator_loss=0.456
1/1 [=====] - 0s 24ms/step
epoch 2819 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2819 - batch 6/10, discriminator_loss=0.000, generator_loss=0.052
1/1 [=====] - 0s 21ms/step
epoch 2819 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2819 - batch 8/10, discriminator_loss=0.000, generator_loss=0.044
1/1 [=====] - 0s 21ms/step
epoch 2819 - batch 9/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 22ms/step
epoch 2819 - batch 10/10, discriminator_loss=0.000, generator_loss=0.135
1/1 [=====] - 0s 18ms/step
epoch 2820 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2820 - batch 2/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 17ms/step
epoch 2820 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2820 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2820 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2820 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2820 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2820 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2820 - batch 9/10, discriminator_loss=0.000, generator_loss=0.598
1/1 [=====] - 0s 26ms/step
epoch 2820 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2821 - batch 1/10, discriminator_loss=0.000, generator_loss=0.555
1/1 [=====] - 0s 22ms/step
epoch 2821 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2821 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2821 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2821 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2821 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 16ms/step
epoch 2821 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2821 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2821 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2821 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
4/4 [=====] - 0s 52ms/step
Accuracy réelle : 100%, fausse : 68%
1/1 [=====] - 0s 27ms/step
epoch 2822 - batch 1/10, discriminator_loss=0.000, generator_loss=0.567
1/1 [=====] - 0s 25ms/step
epoch 2822 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 44ms/step
epoch 2822 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 33ms/step
epoch 2822 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2822 - batch 5/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 23ms/step
epoch 2822 - batch 6/10, discriminator_loss=0.000, generator_loss=0.496
1/1 [=====] - 0s 41ms/step
epoch 2822 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 25ms/step
epoch 2822 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 43ms/step
epoch 2822 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 34ms/step
epoch 2822 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2823 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2823 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 31ms/step
epoch 2823 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 48ms/step
epoch 2823 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2823 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 48ms/step
epoch 2823 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 35ms/step
epoch 2823 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2823 - batch 8/10, discriminator_loss=0.000, generator_loss=0.243
1/1 [=====] - 0s 20ms/step
epoch 2823 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 22ms/step
epoch 2823 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2824 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2824 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 20ms/step
epoch 2824 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2824 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2824 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2824 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2824 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 29ms/step
epoch 2824 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2824 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2824 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2825 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2825 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2825 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2825 - batch 4/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2825 - batch 5/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 20ms/step
epoch 2825 - batch 6/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 16ms/step
epoch 2825 - batch 7/10, discriminator_loss=0.000, generator_loss=0.629
1/1 [=====] - 0s 16ms/step
epoch 2825 - batch 8/10, discriminator_loss=0.000, generator_loss=0.474
1/1 [=====] - 0s 16ms/step
epoch 2825 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2825 - batch 10/10, discriminator_loss=0.000, generator_loss=0.006
1/1 [=====] - 0s 26ms/step
epoch 2826 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2826 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2826 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 25ms/step
epoch 2826 - batch 4/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 19ms/step
epoch 2826 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2826 - batch 6/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 18ms/step
epoch 2826 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2826 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2826 - batch 9/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 16ms/step
epoch 2826 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2827 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2827 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2827 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 29ms/step
epoch 2827 - batch 4/10, discriminator_loss=0.000, generator_loss=0.502
1/1 [=====] - 0s 17ms/step
epoch 2827 - batch 5/10, discriminator_loss=0.000, generator_loss=0.612
1/1 [=====] - 0s 27ms/step
epoch 2827 - batch 6/10, discriminator_loss=0.000, generator_loss=0.003
1/1 [=====] - 0s 17ms/step
epoch 2827 - batch 7/10, discriminator_loss=0.000, generator_loss=0.016
1/1 [=====] - 0s 16ms/step
epoch 2827 - batch 8/10, discriminator_loss=0.000, generator_loss=0.066
1/1 [=====] - 0s 16ms/step
epoch 2827 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 28ms/step
epoch 2827 - batch 10/10, discriminator_loss=0.000, generator_loss=0.933
1/1 [=====] - 0s 16ms/step
epoch 2828 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2828 - batch 2/10, discriminator_loss=0.000, generator_loss=0.024
1/1 [=====] - 0s 16ms/step
epoch 2828 - batch 3/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 18ms/step
epoch 2828 - batch 4/10, discriminator_loss=0.000, generator_loss=0.052
1/1 [=====] - 0s 17ms/step
epoch 2828 - batch 5/10, discriminator_loss=0.000, generator_loss=0.200
1/1 [=====] - 0s 27ms/step
epoch 2828 - batch 6/10, discriminator_loss=0.000, generator_loss=0.415
1/1 [=====] - 0s 26ms/step
epoch 2828 - batch 7/10, discriminator_loss=0.000, generator_loss=1.564

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1/1 [=====] - 0s 22ms/step
epoch 2828 - batch 8/10, discriminator_loss=0.000, generator_loss=0.007
1/1 [=====] - 0s 20ms/step
epoch 2828 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2828 - batch 10/10, discriminator_loss=0.000, generator_loss=0.007
1/1 [=====] - 0s 19ms/step
epoch 2829 - batch 1/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 25ms/step
epoch 2829 - batch 2/10, discriminator_loss=0.002, generator_loss=1.712
1/1 [=====] - 0s 20ms/step
epoch 2829 - batch 3/10, discriminator_loss=0.004, generator_loss=0.127
1/1 [=====] - 0s 21ms/step
epoch 2829 - batch 4/10, discriminator_loss=0.000, generator_loss=0.051
1/1 [=====] - 0s 22ms/step
epoch 2829 - batch 5/10, discriminator_loss=0.000, generator_loss=3.400
1/1 [=====] - 0s 18ms/step
epoch 2829 - batch 6/10, discriminator_loss=0.000, generator_loss=5.164
1/1 [=====] - 0s 16ms/step
epoch 2829 - batch 7/10, discriminator_loss=0.000, generator_loss=2.247
1/1 [=====] - 0s 23ms/step
epoch 2829 - batch 8/10, discriminator_loss=0.178, generator_loss=1.317
1/1 [=====] - 0s 16ms/step
epoch 2829 - batch 9/10, discriminator_loss=0.000, generator_loss=0.339
1/1 [=====] - 0s 22ms/step
epoch 2829 - batch 10/10, discriminator_loss=0.000, generator_loss=3.135
1/1 [=====] - 0s 22ms/step
epoch 2830 - batch 1/10, discriminator_loss=0.000, generator_loss=0.011
1/1 [=====] - 0s 24ms/step
epoch 2830 - batch 2/10, discriminator_loss=0.000, generator_loss=0.816
1/1 [=====] - 0s 24ms/step
epoch 2830 - batch 3/10, discriminator_loss=0.000, generator_loss=0.814
1/1 [=====] - 0s 30ms/step
epoch 2830 - batch 4/10, discriminator_loss=0.669, generator_loss=13.549
1/1 [=====] - 0s 17ms/step
epoch 2830 - batch 5/10, discriminator_loss=0.005, generator_loss=20.891
1/1 [=====] - 0s 20ms/step
epoch 2830 - batch 6/10, discriminator_loss=0.000, generator_loss=30.394
1/1 [=====] - 0s 20ms/step
epoch 2830 - batch 7/10, discriminator_loss=0.000, generator_loss=16.327
1/1 [=====] - 0s 23ms/step
epoch 2830 - batch 8/10, discriminator_loss=0.000, generator_loss=6.849
1/1 [=====] - 0s 24ms/step
epoch 2830 - batch 9/10, discriminator_loss=0.000, generator_loss=2.357
1/1 [=====] - 0s 22ms/step
epoch 2830 - batch 10/10, discriminator_loss=0.000, generator_loss=3.121
1/1 [=====] - 0s 24ms/step
epoch 2831 - batch 1/10, discriminator_loss=0.000, generator_loss=1.691

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1/1 [=====] - 0s 24ms/step
epoch 2831 - batch 2/10, discriminator_loss=0.000, generator_loss=0.381
1/1 [=====] - 0s 27ms/step
epoch 2831 - batch 3/10, discriminator_loss=0.000, generator_loss=0.641
1/1 [=====] - 0s 24ms/step
epoch 2831 - batch 4/10, discriminator_loss=0.000, generator_loss=0.539
1/1 [=====] - 0s 30ms/step
epoch 2831 - batch 5/10, discriminator_loss=0.000, generator_loss=1.147
1/1 [=====] - 0s 35ms/step
epoch 2831 - batch 6/10, discriminator_loss=0.000, generator_loss=0.385
1/1 [=====] - 0s 53ms/step
epoch 2831 - batch 7/10, discriminator_loss=0.000, generator_loss=0.992
1/1 [=====] - 0s 36ms/step
epoch 2831 - batch 8/10, discriminator_loss=0.000, generator_loss=0.308
1/1 [=====] - 0s 27ms/step
epoch 2831 - batch 9/10, discriminator_loss=0.000, generator_loss=1.942
1/1 [=====] - 0s 27ms/step
epoch 2831 - batch 10/10, discriminator_loss=0.000, generator_loss=0.016
1/1 [=====] - 0s 30ms/step
epoch 2832 - batch 1/10, discriminator_loss=0.000, generator_loss=0.327
1/1 [=====] - 0s 59ms/step
epoch 2832 - batch 2/10, discriminator_loss=0.000, generator_loss=2.395
1/1 [=====] - 0s 53ms/step
epoch 2832 - batch 3/10, discriminator_loss=0.000, generator_loss=0.006
1/1 [=====] - 0s 39ms/step
epoch 2832 - batch 4/10, discriminator_loss=0.000, generator_loss=0.345
1/1 [=====] - 0s 34ms/step
epoch 2832 - batch 5/10, discriminator_loss=0.000, generator_loss=3.288
1/1 [=====] - 0s 53ms/step
epoch 2832 - batch 6/10, discriminator_loss=0.000, generator_loss=3.231
1/1 [=====] - 0s 49ms/step
epoch 2832 - batch 7/10, discriminator_loss=0.000, generator_loss=6.173
1/1 [=====] - 0s 42ms/step
epoch 2832 - batch 8/10, discriminator_loss=0.000, generator_loss=3.111
1/1 [=====] - 0s 54ms/step
epoch 2832 - batch 9/10, discriminator_loss=0.000, generator_loss=4.015
1/1 [=====] - 0s 23ms/step
epoch 2832 - batch 10/10, discriminator_loss=0.000, generator_loss=5.401
1/1 [=====] - 0s 52ms/step
epoch 2833 - batch 1/10, discriminator_loss=0.000, generator_loss=4.471
1/1 [=====] - 0s 17ms/step
epoch 2833 - batch 2/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 22ms/step
epoch 2833 - batch 3/10, discriminator_loss=0.000, generator_loss=1.687
1/1 [=====] - 0s 22ms/step
epoch 2833 - batch 4/10, discriminator_loss=0.000, generator_loss=1.714
1/1 [=====] - 0s 20ms/step
epoch 2833 - batch 5/10, discriminator_loss=0.000, generator_loss=5.915

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1/1 [=====] - 0s 19ms/step
epoch 2833 - batch 6/10, discriminator_loss=0.000, generator_loss=7.704
1/1 [=====] - 0s 20ms/step
epoch 2833 - batch 7/10, discriminator_loss=0.000, generator_loss=6.710
1/1 [=====] - 0s 16ms/step
epoch 2833 - batch 8/10, discriminator_loss=0.000, generator_loss=12.675
1/1 [=====] - 0s 16ms/step
epoch 2833 - batch 9/10, discriminator_loss=0.000, generator_loss=6.052
1/1 [=====] - 0s 16ms/step
epoch 2833 - batch 10/10, discriminator_loss=0.000, generator_loss=9.649
1/1 [=====] - 0s 18ms/step
epoch 2834 - batch 1/10, discriminator_loss=0.000, generator_loss=3.047
1/1 [=====] - 0s 22ms/step
epoch 2834 - batch 2/10, discriminator_loss=0.000, generator_loss=0.825
1/1 [=====] - 0s 18ms/step
epoch 2834 - batch 3/10, discriminator_loss=0.000, generator_loss=1.134
1/1 [=====] - 0s 22ms/step
epoch 2834 - batch 4/10, discriminator_loss=0.000, generator_loss=2.698
1/1 [=====] - 0s 18ms/step
epoch 2834 - batch 5/10, discriminator_loss=0.000, generator_loss=0.006
1/1 [=====] - 0s 23ms/step
epoch 2834 - batch 6/10, discriminator_loss=0.000, generator_loss=1.683
1/1 [=====] - 0s 24ms/step
epoch 2834 - batch 7/10, discriminator_loss=0.000, generator_loss=1.235
1/1 [=====] - 0s 19ms/step
epoch 2834 - batch 8/10, discriminator_loss=0.000, generator_loss=5.283
1/1 [=====] - 0s 16ms/step
epoch 2834 - batch 9/10, discriminator_loss=0.000, generator_loss=1.208
1/1 [=====] - 0s 18ms/step
epoch 2834 - batch 10/10, discriminator_loss=0.000, generator_loss=2.875
1/1 [=====] - 0s 20ms/step
epoch 2835 - batch 1/10, discriminator_loss=0.000, generator_loss=2.539
1/1 [=====] - 0s 19ms/step
epoch 2835 - batch 2/10, discriminator_loss=0.000, generator_loss=0.021
1/1 [=====] - 0s 18ms/step
epoch 2835 - batch 3/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 18ms/step
epoch 2835 - batch 4/10, discriminator_loss=0.000, generator_loss=0.189
1/1 [=====] - 0s 18ms/step
epoch 2835 - batch 5/10, discriminator_loss=0.000, generator_loss=0.944
1/1 [=====] - 0s 20ms/step
epoch 2835 - batch 6/10, discriminator_loss=0.000, generator_loss=0.982
1/1 [=====] - 0s 20ms/step
epoch 2835 - batch 7/10, discriminator_loss=0.000, generator_loss=0.480
1/1 [=====] - 0s 17ms/step
epoch 2835 - batch 8/10, discriminator_loss=0.456, generator_loss=17.958
1/1 [=====] - 0s 16ms/step
epoch 2835 - batch 9/10, discriminator_loss=0.000, generator_loss=36.010

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1/1 [=====] - 0s 25ms/step
epoch 2835 - batch 10/10, discriminator_loss=0.000, generator_loss=53.303
1/1 [=====] - 0s 29ms/step
epoch 2836 - batch 1/10, discriminator_loss=0.000, generator_loss=46.947
1/1 [=====] - 0s 20ms/step
epoch 2836 - batch 2/10, discriminator_loss=0.000, generator_loss=34.881
1/1 [=====] - 0s 24ms/step
epoch 2836 - batch 3/10, discriminator_loss=0.000, generator_loss=15.907
1/1 [=====] - 0s 23ms/step
epoch 2836 - batch 4/10, discriminator_loss=0.000, generator_loss=7.569
1/1 [=====] - 0s 23ms/step
epoch 2836 - batch 5/10, discriminator_loss=0.325, generator_loss=12.232
1/1 [=====] - 0s 18ms/step
epoch 2836 - batch 6/10, discriminator_loss=0.000, generator_loss=7.633
1/1 [=====] - 0s 25ms/step
epoch 2836 - batch 7/10, discriminator_loss=0.000, generator_loss=5.255
1/1 [=====] - 0s 22ms/step
epoch 2836 - batch 8/10, discriminator_loss=0.000, generator_loss=3.419
1/1 [=====] - 0s 22ms/step
epoch 2836 - batch 9/10, discriminator_loss=4.299, generator_loss=2.547
1/1 [=====] - 0s 19ms/step
epoch 2836 - batch 10/10, discriminator_loss=0.000, generator_loss=1.018
1/1 [=====] - 0s 22ms/step
epoch 2837 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2837 - batch 2/10, discriminator_loss=0.000, generator_loss=6.737
1/1 [=====] - 0s 23ms/step
epoch 2837 - batch 3/10, discriminator_loss=0.000, generator_loss=0.008
1/1 [=====] - 0s 23ms/step
epoch 2837 - batch 4/10, discriminator_loss=0.000, generator_loss=0.445
1/1 [=====] - 0s 24ms/step
epoch 2837 - batch 5/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 18ms/step
epoch 2837 - batch 6/10, discriminator_loss=0.000, generator_loss=0.201
1/1 [=====] - 0s 20ms/step
epoch 2837 - batch 7/10, discriminator_loss=0.000, generator_loss=0.268
1/1 [=====] - 0s 19ms/step
epoch 2837 - batch 8/10, discriminator_loss=0.398, generator_loss=0.335
1/1 [=====] - 0s 28ms/step
epoch 2837 - batch 9/10, discriminator_loss=1.878, generator_loss=5.755
1/1 [=====] - 0s 31ms/step
epoch 2837 - batch 10/10, discriminator_loss=0.000, generator_loss=13.827
1/1 [=====] - 0s 19ms/step
epoch 2838 - batch 1/10, discriminator_loss=0.000, generator_loss=15.630
1/1 [=====] - 0s 17ms/step
epoch 2838 - batch 2/10, discriminator_loss=0.000, generator_loss=8.812
1/1 [=====] - 0s 16ms/step
epoch 2838 - batch 3/10, discriminator_loss=0.000, generator_loss=13.703

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1/1 [=====] - 0s 18ms/step
epoch 2838 - batch 4/10, discriminator_loss=0.000, generator_loss=3.649
1/1 [=====] - 0s 19ms/step
epoch 2838 - batch 5/10, discriminator_loss=4.488, generator_loss=3.583
1/1 [=====] - 0s 17ms/step
epoch 2838 - batch 6/10, discriminator_loss=3.860, generator_loss=2.077
1/1 [=====] - 0s 20ms/step
epoch 2838 - batch 7/10, discriminator_loss=0.000, generator_loss=1.903
1/1 [=====] - 0s 16ms/step
epoch 2838 - batch 8/10, discriminator_loss=0.000, generator_loss=1.832
1/1 [=====] - 0s 19ms/step
epoch 2838 - batch 9/10, discriminator_loss=0.000, generator_loss=0.349
1/1 [=====] - 0s 18ms/step
epoch 2838 - batch 10/10, discriminator_loss=0.002, generator_loss=1.865
1/1 [=====] - 0s 21ms/step
epoch 2839 - batch 1/10, discriminator_loss=0.000, generator_loss=1.000
1/1 [=====] - 0s 23ms/step
epoch 2839 - batch 2/10, discriminator_loss=0.000, generator_loss=0.033
1/1 [=====] - 0s 19ms/step
epoch 2839 - batch 3/10, discriminator_loss=0.000, generator_loss=0.809
1/1 [=====] - 0s 17ms/step
epoch 2839 - batch 4/10, discriminator_loss=0.000, generator_loss=1.611
1/1 [=====] - 0s 22ms/step
epoch 2839 - batch 5/10, discriminator_loss=0.000, generator_loss=0.720
1/1 [=====] - 0s 16ms/step
epoch 2839 - batch 6/10, discriminator_loss=0.061, generator_loss=1.407
1/1 [=====] - 0s 18ms/step
epoch 2839 - batch 7/10, discriminator_loss=2.755, generator_loss=0.885
1/1 [=====] - 0s 18ms/step
epoch 2839 - batch 8/10, discriminator_loss=0.000, generator_loss=0.067
1/1 [=====] - 0s 19ms/step
epoch 2839 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 16ms/step
epoch 2839 - batch 10/10, discriminator_loss=2.523, generator_loss=0.119
1/1 [=====] - 0s 25ms/step
epoch 2840 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2840 - batch 2/10, discriminator_loss=0.000, generator_loss=0.007
1/1 [=====] - 0s 27ms/step
epoch 2840 - batch 3/10, discriminator_loss=0.000, generator_loss=0.140
1/1 [=====] - 0s 23ms/step
epoch 2840 - batch 4/10, discriminator_loss=0.000, generator_loss=0.028
1/1 [=====] - 0s 17ms/step
epoch 2840 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2840 - batch 6/10, discriminator_loss=0.000, generator_loss=0.238
1/1 [=====] - 0s 30ms/step
epoch 2840 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000

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1/1 [=====] - 0s 22ms/step
epoch 2840 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2840 - batch 9/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 23ms/step
epoch 2840 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 27ms/step
epoch 2841 - batch 1/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 19ms/step
epoch 2841 - batch 2/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2841 - batch 3/10, discriminator_loss=0.002, generator_loss=0.000
1/1 [=====] - 0s 17ms/step
epoch 2841 - batch 4/10, discriminator_loss=0.003, generator_loss=0.000
1/1 [=====] - 0s 21ms/step
epoch 2841 - batch 5/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 31ms/step
epoch 2841 - batch 6/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2841 - batch 7/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 22ms/step
epoch 2841 - batch 8/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 18ms/step
epoch 2841 - batch 9/10, discriminator_loss=0.001, generator_loss=0.023
1/1 [=====] - 0s 16ms/step
epoch 2841 - batch 10/10, discriminator_loss=0.000, generator_loss=0.000
4/4 [=====] - 0s 54ms/step
Accuracy réelle : 100%, fausse : 0%
1/1 [=====] - 0s 17ms/step
epoch 2842 - batch 1/10, discriminator_loss=0.015, generator_loss=0.012
1/1 [=====] - 0s 17ms/step
epoch 2842 - batch 2/10, discriminator_loss=0.068, generator_loss=0.001
1/1 [=====] - 0s 19ms/step
epoch 2842 - batch 3/10, discriminator_loss=0.000, generator_loss=0.593
1/1 [=====] - 0s 26ms/step
epoch 2842 - batch 4/10, discriminator_loss=0.000, generator_loss=1.121
1/1 [=====] - 0s 15ms/step
epoch 2842 - batch 5/10, discriminator_loss=0.000, generator_loss=1.189
1/1 [=====] - 0s 18ms/step
epoch 2842 - batch 6/10, discriminator_loss=0.000, generator_loss=1.314
1/1 [=====] - 0s 24ms/step
epoch 2842 - batch 7/10, discriminator_loss=0.000, generator_loss=1.638
1/1 [=====] - 0s 17ms/step
epoch 2842 - batch 8/10, discriminator_loss=0.000, generator_loss=0.793
1/1 [=====] - 0s 24ms/step
epoch 2842 - batch 9/10, discriminator_loss=0.000, generator_loss=0.507
1/1 [=====] - 0s 22ms/step
epoch 2842 - batch 10/10, discriminator_loss=0.000, generator_loss=1.122

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1/1 [=====] - 0s 23ms/step
epoch 2843 - batch 1/10, discriminator_loss=0.000, generator_loss=0.639
1/1 [=====] - 0s 17ms/step
epoch 2843 - batch 2/10, discriminator_loss=0.000, generator_loss=0.557
1/1 [=====] - 0s 23ms/step
epoch 2843 - batch 3/10, discriminator_loss=0.000, generator_loss=1.383
1/1 [=====] - 0s 22ms/step
epoch 2843 - batch 4/10, discriminator_loss=0.000, generator_loss=0.630
1/1 [=====] - 0s 20ms/step
epoch 2843 - batch 5/10, discriminator_loss=0.000, generator_loss=0.889
1/1 [=====] - 0s 21ms/step
epoch 2843 - batch 6/10, discriminator_loss=0.000, generator_loss=0.362
1/1 [=====] - 0s 20ms/step
epoch 2843 - batch 7/10, discriminator_loss=0.000, generator_loss=5.896
1/1 [=====] - 0s 17ms/step
epoch 2843 - batch 8/10, discriminator_loss=0.000, generator_loss=0.009
1/1 [=====] - 0s 16ms/step
epoch 2843 - batch 9/10, discriminator_loss=0.001, generator_loss=0.217
1/1 [=====] - 0s 22ms/step
epoch 2843 - batch 10/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 18ms/step
epoch 2844 - batch 1/10, discriminator_loss=0.000, generator_loss=0.195
1/1 [=====] - 0s 25ms/step
epoch 2844 - batch 2/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 22ms/step
epoch 2844 - batch 3/10, discriminator_loss=0.000, generator_loss=0.167
1/1 [=====] - 0s 16ms/step
epoch 2844 - batch 4/10, discriminator_loss=0.000, generator_loss=0.078
1/1 [=====] - 0s 18ms/step
epoch 2844 - batch 5/10, discriminator_loss=0.000, generator_loss=0.024
1/1 [=====] - 0s 16ms/step
epoch 2844 - batch 6/10, discriminator_loss=0.000, generator_loss=0.219
1/1 [=====] - 0s 16ms/step
epoch 2844 - batch 7/10, discriminator_loss=0.000, generator_loss=0.088
1/1 [=====] - 0s 16ms/step
epoch 2844 - batch 8/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 19ms/step
epoch 2844 - batch 9/10, discriminator_loss=0.000, generator_loss=0.007
1/1 [=====] - 0s 28ms/step
epoch 2844 - batch 10/10, discriminator_loss=0.000, generator_loss=0.055
1/1 [=====] - 0s 24ms/step
epoch 2845 - batch 1/10, discriminator_loss=0.000, generator_loss=0.027
1/1 [=====] - 0s 24ms/step
epoch 2845 - batch 2/10, discriminator_loss=0.000, generator_loss=0.004
1/1 [=====] - 0s 22ms/step
epoch 2845 - batch 3/10, discriminator_loss=0.000, generator_loss=0.000
1/1 [=====] - 0s 24ms/step
epoch 2845 - batch 4/10, discriminator_loss=0.000, generator_loss=0.032

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1/1 [=====] - 0s 23ms/step
epoch 2845 - batch 5/10, discriminator_loss=0.000, generator_loss=0.069
1/1 [=====] - 0s 18ms/step
epoch 2845 - batch 6/10, discriminator_loss=0.000, generator_loss=0.091
1/1 [=====] - 0s 21ms/step
epoch 2845 - batch 7/10, discriminator_loss=0.000, generator_loss=0.041
1/1 [=====] - 0s 16ms/step
epoch 2845 - batch 8/10, discriminator_loss=0.000, generator_loss=0.267
1/1 [=====] - 0s 16ms/step
epoch 2845 - batch 9/10, discriminator_loss=0.000, generator_loss=0.025
1/1 [=====] - 0s 19ms/step
epoch 2845 - batch 10/10, discriminator_loss=0.000, generator_loss=0.099
1/1 [=====] - 0s 17ms/step
epoch 2846 - batch 1/10, discriminator_loss=0.004, generator_loss=0.018
1/1 [=====] - 0s 25ms/step
epoch 2846 - batch 2/10, discriminator_loss=0.000, generator_loss=0.017
1/1 [=====] - 0s 16ms/step
epoch 2846 - batch 3/10, discriminator_loss=0.000, generator_loss=0.228
1/1 [=====] - 0s 25ms/step
epoch 2846 - batch 4/10, discriminator_loss=0.000, generator_loss=0.001
1/1 [=====] - 0s 19ms/step
epoch 2846 - batch 5/10, discriminator_loss=0.000, generator_loss=0.040
1/1 [=====] - 0s 20ms/step
epoch 2846 - batch 6/10, discriminator_loss=0.000, generator_loss=0.010
1/1 [=====] - 0s 17ms/step
epoch 2846 - batch 7/10, discriminator_loss=0.000, generator_loss=0.024
1/1 [=====] - 0s 17ms/step
epoch 2846 - batch 8/10, discriminator_loss=0.000, generator_loss=0.053
1/1 [=====] - 0s 19ms/step
epoch 2846 - batch 9/10, discriminator_loss=0.000, generator_loss=0.060
1/1 [=====] - 0s 26ms/step
epoch 2846 - batch 10/10, discriminator_loss=0.001, generator_loss=0.003
1/1 [=====] - 0s 19ms/step
epoch 2847 - batch 1/10, discriminator_loss=0.000, generator_loss=0.080
1/1 [=====] - 0s 32ms/step
epoch 2847 - batch 2/10, discriminator_loss=0.000, generator_loss=0.002
1/1 [=====] - 0s 19ms/step
epoch 2847 - batch 3/10, discriminator_loss=0.000, generator_loss=0.025
1/1 [=====] - 0s 23ms/step
epoch 2847 - batch 4/10, discriminator_loss=0.000, generator_loss=0.084
1/1 [=====] - 0s 21ms/step
epoch 2847 - batch 5/10, discriminator_loss=0.000, generator_loss=0.076
1/1 [=====] - 0s 18ms/step
epoch 2847 - batch 6/10, discriminator_loss=0.000, generator_loss=0.050
1/1 [=====] - 0s 30ms/step
epoch 2847 - batch 7/10, discriminator_loss=0.000, generator_loss=0.134
1/1 [=====] - 0s 22ms/step
epoch 2847 - batch 8/10, discriminator_loss=0.000, generator_loss=0.035

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1/1 [=====] - 0s 20ms/step
epoch 2847 - batch 9/10, discriminator_loss=0.000, generator_loss=0.263
1/1 [=====] - 0s 25ms/step
epoch 2847 - batch 10/10, discriminator_loss=0.000, generator_loss=0.025
1/1 [=====] - 0s 20ms/step
epoch 2848 - batch 1/10, discriminator_loss=0.000, generator_loss=0.296
1/1 [=====] - 0s 20ms/step
epoch 2848 - batch 2/10, discriminator_loss=0.000, generator_loss=0.090
1/1 [=====] - 0s 25ms/step
epoch 2848 - batch 3/10, discriminator_loss=0.000, generator_loss=0.112
1/1 [=====] - 0s 25ms/step
epoch 2848 - batch 4/10, discriminator_loss=0.000, generator_loss=0.025
1/1 [=====] - 0s 24ms/step
epoch 2848 - batch 5/10, discriminator_loss=0.000, generator_loss=0.255
1/1 [=====] - 0s 17ms/step
epoch 2848 - batch 6/10, discriminator_loss=0.000, generator_loss=0.019
1/1 [=====] - 0s 23ms/step
epoch 2848 - batch 7/10, discriminator_loss=0.000, generator_loss=0.079
1/1 [=====] - 0s 21ms/step
epoch 2848 - batch 8/10, discriminator_loss=0.000, generator_loss=0.502
1/1 [=====] - 0s 22ms/step
epoch 2848 - batch 9/10, discriminator_loss=0.000, generator_loss=0.156
1/1 [=====] - 0s 19ms/step
epoch 2848 - batch 10/10, discriminator_loss=0.001, generator_loss=0.068
1/1 [=====] - 0s 22ms/step
epoch 2849 - batch 1/10, discriminator_loss=0.001, generator_loss=0.060
1/1 [=====] - 0s 24ms/step
epoch 2849 - batch 2/10, discriminator_loss=0.000, generator_loss=0.027
1/1 [=====] - 0s 16ms/step
epoch 2849 - batch 3/10, discriminator_loss=0.000, generator_loss=0.022
1/1 [=====] - 0s 18ms/step
epoch 2849 - batch 4/10, discriminator_loss=0.000, generator_loss=0.355
1/1 [=====] - 0s 24ms/step
epoch 2849 - batch 5/10, discriminator_loss=0.001, generator_loss=0.026
1/1 [=====] - 0s 17ms/step
epoch 2849 - batch 6/10, discriminator_loss=0.001, generator_loss=0.080
1/1 [=====] - 0s 22ms/step
epoch 2849 - batch 7/10, discriminator_loss=0.003, generator_loss=0.154
1/1 [=====] - 0s 20ms/step
epoch 2849 - batch 8/10, discriminator_loss=0.000, generator_loss=0.169
1/1 [=====] - 0s 21ms/step
epoch 2849 - batch 9/10, discriminator_loss=0.000, generator_loss=0.036
1/1 [=====] - 0s 17ms/step
epoch 2849 - batch 10/10, discriminator_loss=0.000, generator_loss=0.259
1/1 [=====] - 0s 17ms/step
epoch 2850 - batch 1/10, discriminator_loss=0.000, generator_loss=0.142
1/1 [=====] - 0s 23ms/step
epoch 2850 - batch 2/10, discriminator_loss=0.000, generator_loss=0.159

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1/1 [=====] - 0s 23ms/step
epoch 2850 - batch 3/10, discriminator_loss=0.000, generator_loss=0.538
1/1 [=====] - 0s 20ms/step
epoch 2850 - batch 4/10, discriminator_loss=0.001, generator_loss=0.215
1/1 [=====] - 0s 16ms/step
epoch 2850 - batch 5/10, discriminator_loss=0.000, generator_loss=0.150
1/1 [=====] - 0s 16ms/step
epoch 2850 - batch 6/10, discriminator_loss=0.001, generator_loss=0.009
1/1 [=====] - 0s 21ms/step
epoch 2850 - batch 7/10, discriminator_loss=0.000, generator_loss=0.089
1/1 [=====] - 0s 16ms/step
epoch 2850 - batch 8/10, discriminator_loss=0.001, generator_loss=0.012
1/1 [=====] - 0s 17ms/step
epoch 2850 - batch 9/10, discriminator_loss=0.003, generator_loss=0.467
1/1 [=====] - 0s 21ms/step
epoch 2850 - batch 10/10, discriminator_loss=0.002, generator_loss=0.127
1/1 [=====] - 0s 23ms/step
epoch 2851 - batch 1/10, discriminator_loss=0.001, generator_loss=0.093
1/1 [=====] - 0s 22ms/step
epoch 2851 - batch 2/10, discriminator_loss=0.003, generator_loss=0.017
1/1 [=====] - 0s 23ms/step
epoch 2851 - batch 3/10, discriminator_loss=0.000, generator_loss=0.296
1/1 [=====] - 0s 24ms/step
epoch 2851 - batch 4/10, discriminator_loss=0.003, generator_loss=0.326
1/1 [=====] - 0s 26ms/step
epoch 2851 - batch 5/10, discriminator_loss=0.000, generator_loss=0.126
1/1 [=====] - 0s 17ms/step
epoch 2851 - batch 6/10, discriminator_loss=0.002, generator_loss=0.104
1/1 [=====] - 0s 23ms/step
epoch 2851 - batch 7/10, discriminator_loss=0.021, generator_loss=0.078
1/1 [=====] - 0s 19ms/step
epoch 2851 - batch 8/10, discriminator_loss=0.000, generator_loss=0.330
1/1 [=====] - 0s 16ms/step
epoch 2851 - batch 9/10, discriminator_loss=0.003, generator_loss=0.162
1/1 [=====] - 0s 18ms/step
epoch 2851 - batch 10/10, discriminator_loss=0.001, generator_loss=0.155
1/1 [=====] - 0s 18ms/step
epoch 2852 - batch 1/10, discriminator_loss=0.000, generator_loss=0.096
1/1 [=====] - 0s 22ms/step
epoch 2852 - batch 2/10, discriminator_loss=0.000, generator_loss=0.749
1/1 [=====] - 0s 21ms/step
epoch 2852 - batch 3/10, discriminator_loss=0.000, generator_loss=0.031
1/1 [=====] - 0s 22ms/step
epoch 2852 - batch 4/10, discriminator_loss=0.005, generator_loss=0.444
1/1 [=====] - 0s 28ms/step
epoch 2852 - batch 5/10, discriminator_loss=0.001, generator_loss=0.977
1/1 [=====] - 0s 16ms/step
epoch 2852 - batch 6/10, discriminator_loss=0.000, generator_loss=0.642

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1/1 [=====] - 0s 17ms/step
epoch 2852 - batch 7/10, discriminator_loss=0.000, generator_loss=0.403
1/1 [=====] - 0s 17ms/step
epoch 2852 - batch 8/10, discriminator_loss=0.000, generator_loss=0.732
1/1 [=====] - 0s 16ms/step
epoch 2852 - batch 9/10, discriminator_loss=0.000, generator_loss=0.454
1/1 [=====] - 0s 17ms/step
epoch 2852 - batch 10/10, discriminator_loss=0.000, generator_loss=0.094
1/1 [=====] - 0s 20ms/step
epoch 2853 - batch 1/10, discriminator_loss=0.001, generator_loss=1.895
1/1 [=====] - 0s 21ms/step
epoch 2853 - batch 2/10, discriminator_loss=0.001, generator_loss=0.503
1/1 [=====] - 0s 28ms/step
epoch 2853 - batch 3/10, discriminator_loss=0.001, generator_loss=0.396
1/1 [=====] - 0s 21ms/step
epoch 2853 - batch 4/10, discriminator_loss=0.001, generator_loss=0.097
1/1 [=====] - 0s 20ms/step
epoch 2853 - batch 5/10, discriminator_loss=0.001, generator_loss=0.555
1/1 [=====] - 0s 21ms/step
epoch 2853 - batch 6/10, discriminator_loss=0.003, generator_loss=0.176
1/1 [=====] - 0s 22ms/step
epoch 2853 - batch 7/10, discriminator_loss=0.001, generator_loss=0.119
1/1 [=====] - 0s 16ms/step
epoch 2853 - batch 8/10, discriminator_loss=0.001, generator_loss=0.253
1/1 [=====] - 0s 18ms/step
epoch 2853 - batch 9/10, discriminator_loss=0.003, generator_loss=0.260
1/1 [=====] - 0s 17ms/step
epoch 2853 - batch 10/10, discriminator_loss=0.001, generator_loss=0.609
1/1 [=====] - 0s 21ms/step
epoch 2854 - batch 1/10, discriminator_loss=0.000, generator_loss=0.574
1/1 [=====] - 0s 22ms/step
epoch 2854 - batch 2/10, discriminator_loss=0.000, generator_loss=0.242
1/1 [=====] - 0s 23ms/step
epoch 2854 - batch 3/10, discriminator_loss=0.001, generator_loss=0.356
1/1 [=====] - 0s 17ms/step
epoch 2854 - batch 4/10, discriminator_loss=0.000, generator_loss=0.215
1/1 [=====] - 0s 17ms/step
epoch 2854 - batch 5/10, discriminator_loss=0.012, generator_loss=0.370
1/1 [=====] - 0s 25ms/step
epoch 2854 - batch 6/10, discriminator_loss=0.007, generator_loss=0.358
1/1 [=====] - 0s 18ms/step
epoch 2854 - batch 7/10, discriminator_loss=0.002, generator_loss=0.314
1/1 [=====] - 0s 23ms/step
epoch 2854 - batch 8/10, discriminator_loss=0.000, generator_loss=0.086
1/1 [=====] - 0s 23ms/step
epoch 2854 - batch 9/10, discriminator_loss=0.004, generator_loss=0.148
1/1 [=====] - 0s 22ms/step
epoch 2854 - batch 10/10, discriminator_loss=0.000, generator_loss=0.167

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1/1 [=====] - 0s 22ms/step
epoch 2855 - batch 1/10, discriminator_loss=0.001, generator_loss=0.204
1/1 [=====] - 0s 17ms/step
epoch 2855 - batch 2/10, discriminator_loss=0.011, generator_loss=0.291
1/1 [=====] - 0s 23ms/step
epoch 2855 - batch 3/10, discriminator_loss=0.005, generator_loss=0.674
1/1 [=====] - 0s 16ms/step
epoch 2855 - batch 4/10, discriminator_loss=0.002, generator_loss=0.455
1/1 [=====] - 0s 23ms/step
epoch 2855 - batch 5/10, discriminator_loss=0.000, generator_loss=0.073
1/1 [=====] - 0s 30ms/step
epoch 2855 - batch 6/10, discriminator_loss=0.003, generator_loss=0.752
1/1 [=====] - 0s 21ms/step
epoch 2855 - batch 7/10, discriminator_loss=0.000, generator_loss=0.007
1/1 [=====] - 0s 16ms/step
epoch 2855 - batch 8/10, discriminator_loss=0.001, generator_loss=0.298
1/1 [=====] - 0s 23ms/step
epoch 2855 - batch 9/10, discriminator_loss=0.000, generator_loss=0.484
1/1 [=====] - 0s 20ms/step
epoch 2855 - batch 10/10, discriminator_loss=0.001, generator_loss=0.202
1/1 [=====] - 0s 22ms/step
epoch 2856 - batch 1/10, discriminator_loss=0.001, generator_loss=0.951
1/1 [=====] - 0s 18ms/step
epoch 2856 - batch 2/10, discriminator_loss=0.004, generator_loss=0.210
1/1 [=====] - 0s 22ms/step
epoch 2856 - batch 3/10, discriminator_loss=0.002, generator_loss=0.254
1/1 [=====] - 0s 22ms/step
epoch 2856 - batch 4/10, discriminator_loss=0.234, generator_loss=0.972
1/1 [=====] - 0s 17ms/step
epoch 2856 - batch 5/10, discriminator_loss=0.002, generator_loss=1.531
1/1 [=====] - 0s 26ms/step
epoch 2856 - batch 6/10, discriminator_loss=0.011, generator_loss=2.117
1/1 [=====] - 0s 23ms/step
epoch 2856 - batch 7/10, discriminator_loss=0.000, generator_loss=2.883
1/1 [=====] - 0s 18ms/step
epoch 2856 - batch 8/10, discriminator_loss=0.000, generator_loss=2.160
1/1 [=====] - 0s 18ms/step
epoch 2856 - batch 9/10, discriminator_loss=0.000, generator_loss=3.649
1/1 [=====] - 0s 19ms/step
epoch 2856 - batch 10/10, discriminator_loss=0.002, generator_loss=2.353
1/1 [=====] - 0s 24ms/step
epoch 2857 - batch 1/10, discriminator_loss=0.236, generator_loss=1.424
1/1 [=====] - 0s 19ms/step
epoch 2857 - batch 2/10, discriminator_loss=0.000, generator_loss=1.870
1/1 [=====] - 0s 25ms/step
epoch 2857 - batch 3/10, discriminator_loss=0.016, generator_loss=1.847
1/1 [=====] - 0s 25ms/step
epoch 2857 - batch 4/10, discriminator_loss=0.003, generator_loss=1.592

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1/1 [=====] - 0s 22ms/step
epoch 2857 - batch 5/10, discriminator_loss=0.011, generator_loss=1.265
1/1 [=====] - 0s 24ms/step
epoch 2857 - batch 6/10, discriminator_loss=0.007, generator_loss=0.962
1/1 [=====] - 0s 19ms/step
epoch 2857 - batch 7/10, discriminator_loss=0.101, generator_loss=1.852
1/1 [=====] - 0s 17ms/step
epoch 2857 - batch 8/10, discriminator_loss=0.327, generator_loss=5.555
1/1 [=====] - 0s 19ms/step
epoch 2857 - batch 9/10, discriminator_loss=0.000, generator_loss=9.163
1/1 [=====] - 0s 16ms/step
epoch 2857 - batch 10/10, discriminator_loss=0.004, generator_loss=10.028
1/1 [=====] - 0s 24ms/step
epoch 2858 - batch 1/10, discriminator_loss=0.000, generator_loss=12.056
1/1 [=====] - 0s 24ms/step
epoch 2858 - batch 2/10, discriminator_loss=0.000, generator_loss=13.401
1/1 [=====] - 0s 24ms/step
epoch 2858 - batch 3/10, discriminator_loss=0.000, generator_loss=13.478
1/1 [=====] - 0s 26ms/step
epoch 2858 - batch 4/10, discriminator_loss=0.000, generator_loss=14.551
1/1 [=====] - 0s 24ms/step
epoch 2858 - batch 5/10, discriminator_loss=0.000, generator_loss=13.394
1/1 [=====] - 0s 18ms/step
epoch 2858 - batch 6/10, discriminator_loss=0.000, generator_loss=15.954
1/1 [=====] - 0s 22ms/step
epoch 2858 - batch 7/10, discriminator_loss=0.000, generator_loss=14.059
1/1 [=====] - 0s 27ms/step
epoch 2858 - batch 8/10, discriminator_loss=0.000, generator_loss=16.027
1/1 [=====] - 0s 19ms/step
epoch 2858 - batch 9/10, discriminator_loss=0.000, generator_loss=13.637
1/1 [=====] - 0s 17ms/step
epoch 2858 - batch 10/10, discriminator_loss=0.000, generator_loss=14.944
1/1 [=====] - 0s 20ms/step
epoch 2859 - batch 1/10, discriminator_loss=0.000, generator_loss=15.203
1/1 [=====] - 0s 16ms/step
epoch 2859 - batch 2/10, discriminator_loss=0.000, generator_loss=12.575
1/1 [=====] - 0s 17ms/step
epoch 2859 - batch 3/10, discriminator_loss=0.000, generator_loss=15.024
1/1 [=====] - 0s 18ms/step
epoch 2859 - batch 4/10, discriminator_loss=0.000, generator_loss=12.500
1/1 [=====] - 0s 17ms/step
epoch 2859 - batch 5/10, discriminator_loss=0.002, generator_loss=11.600
1/1 [=====] - 0s 18ms/step
epoch 2859 - batch 6/10, discriminator_loss=0.001, generator_loss=13.165
1/1 [=====] - 0s 17ms/step
epoch 2859 - batch 7/10, discriminator_loss=0.001, generator_loss=10.999
1/1 [=====] - 0s 16ms/step
epoch 2859 - batch 8/10, discriminator_loss=0.000, generator_loss=10.078

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1/1 [=====] - 0s 16ms/step
epoch 2859 - batch 9/10, discriminator_loss=0.000, generator_loss=9.726
1/1 [=====] - 0s 16ms/step
epoch 2859 - batch 10/10, discriminator_loss=0.001, generator_loss=10.100
1/1 [=====] - 0s 21ms/step
epoch 2860 - batch 1/10, discriminator_loss=0.000, generator_loss=9.111
1/1 [=====] - 0s 21ms/step
epoch 2860 - batch 2/10, discriminator_loss=0.004, generator_loss=9.282
1/1 [=====] - 0s 21ms/step
epoch 2860 - batch 3/10, discriminator_loss=0.000, generator_loss=8.735
1/1 [=====] - 0s 24ms/step
epoch 2860 - batch 4/10, discriminator_loss=0.000, generator_loss=8.995
1/1 [=====] - 0s 16ms/step
epoch 2860 - batch 5/10, discriminator_loss=0.004, generator_loss=8.360
1/1 [=====] - 0s 16ms/step
epoch 2860 - batch 6/10, discriminator_loss=0.002, generator_loss=8.228
1/1 [=====] - 0s 23ms/step
epoch 2860 - batch 7/10, discriminator_loss=0.000, generator_loss=8.589
1/1 [=====] - 0s 17ms/step
epoch 2860 - batch 8/10, discriminator_loss=0.002, generator_loss=9.235
1/1 [=====] - 0s 28ms/step
epoch 2860 - batch 9/10, discriminator_loss=0.003, generator_loss=8.960
1/1 [=====] - 0s 17ms/step
epoch 2860 - batch 10/10, discriminator_loss=0.051, generator_loss=8.072
1/1 [=====] - 0s 18ms/step
epoch 2861 - batch 1/10, discriminator_loss=0.004, generator_loss=8.438
1/1 [=====] - 0s 24ms/step
epoch 2861 - batch 2/10, discriminator_loss=0.009, generator_loss=7.852
1/1 [=====] - 0s 21ms/step
epoch 2861 - batch 3/10, discriminator_loss=0.000, generator_loss=8.291
1/1 [=====] - 0s 23ms/step
epoch 2861 - batch 4/10, discriminator_loss=0.000, generator_loss=9.427
1/1 [=====] - 0s 34ms/step
epoch 2861 - batch 5/10, discriminator_loss=0.000, generator_loss=15.124
1/1 [=====] - 0s 17ms/step
epoch 2861 - batch 6/10, discriminator_loss=0.704, generator_loss=11.131
1/1 [=====] - 0s 16ms/step
epoch 2861 - batch 7/10, discriminator_loss=0.001, generator_loss=9.987
1/1 [=====] - 0s 16ms/step
epoch 2861 - batch 8/10, discriminator_loss=0.001, generator_loss=8.614
1/1 [=====] - 0s 17ms/step
epoch 2861 - batch 9/10, discriminator_loss=0.001, generator_loss=8.235
1/1 [=====] - 0s 22ms/step
epoch 2861 - batch 10/10, discriminator_loss=0.004, generator_loss=7.487
4/4 [=====] - 0s 53ms/step
Accuracy réelle : 98%, fausse : 100%
1/1 [=====] - 0s 17ms/step
epoch 2862 - batch 1/10, discriminator_loss=0.000, generator_loss=8.594

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1/1 [=====] - 0s 19ms/step
epoch 2862 - batch 2/10, discriminator_loss=0.004, generator_loss=6.794
1/1 [=====] - 0s 17ms/step
epoch 2862 - batch 3/10, discriminator_loss=0.007, generator_loss=6.962
1/1 [=====] - 0s 17ms/step
epoch 2862 - batch 4/10, discriminator_loss=0.004, generator_loss=6.740
1/1 [=====] - 0s 19ms/step
epoch 2862 - batch 5/10, discriminator_loss=0.000, generator_loss=6.161
1/1 [=====] - 0s 23ms/step
epoch 2862 - batch 6/10, discriminator_loss=0.000, generator_loss=7.247
1/1 [=====] - 0s 23ms/step
epoch 2862 - batch 7/10, discriminator_loss=0.000, generator_loss=6.356
1/1 [=====] - 0s 21ms/step
epoch 2862 - batch 8/10, discriminator_loss=0.017, generator_loss=6.136
1/1 [=====] - 0s 20ms/step
epoch 2862 - batch 9/10, discriminator_loss=0.002, generator_loss=5.956
1/1 [=====] - 0s 21ms/step
epoch 2862 - batch 10/10, discriminator_loss=0.000, generator_loss=6.949
1/1 [=====] - 0s 21ms/step
epoch 2863 - batch 1/10, discriminator_loss=0.000, generator_loss=6.014
1/1 [=====] - 0s 21ms/step
epoch 2863 - batch 2/10, discriminator_loss=0.001, generator_loss=5.348
1/1 [=====] - 0s 23ms/step
epoch 2863 - batch 3/10, discriminator_loss=0.000, generator_loss=5.112
1/1 [=====] - 0s 19ms/step
epoch 2863 - batch 4/10, discriminator_loss=0.000, generator_loss=6.649
1/1 [=====] - 0s 20ms/step
epoch 2863 - batch 5/10, discriminator_loss=0.009, generator_loss=5.140
1/1 [=====] - 0s 16ms/step
epoch 2863 - batch 6/10, discriminator_loss=0.015, generator_loss=4.855
1/1 [=====] - 0s 16ms/step
epoch 2863 - batch 7/10, discriminator_loss=0.004, generator_loss=4.034
1/1 [=====] - 0s 17ms/step
epoch 2863 - batch 8/10, discriminator_loss=0.013, generator_loss=4.098
1/1 [=====] - 0s 16ms/step
epoch 2863 - batch 9/10, discriminator_loss=0.003, generator_loss=4.714
1/1 [=====] - 0s 16ms/step
epoch 2863 - batch 10/10, discriminator_loss=0.004, generator_loss=4.833
1/1 [=====] - 0s 25ms/step
epoch 2864 - batch 1/10, discriminator_loss=0.006, generator_loss=3.805
1/1 [=====] - 0s 17ms/step
epoch 2864 - batch 2/10, discriminator_loss=0.008, generator_loss=4.135
1/1 [=====] - 0s 26ms/step
epoch 2864 - batch 3/10, discriminator_loss=0.001, generator_loss=3.891
1/1 [=====] - 0s 17ms/step
epoch 2864 - batch 4/10, discriminator_loss=0.219, generator_loss=7.023
1/1 [=====] - 0s 20ms/step
epoch 2864 - batch 5/10, discriminator_loss=0.065, generator_loss=5.024

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1/1 [=====] - 0s 24ms/step
epoch 2864 - batch 6/10, discriminator_loss=0.002, generator_loss=7.420
1/1 [=====] - 0s 18ms/step
epoch 2864 - batch 7/10, discriminator_loss=0.003, generator_loss=5.576
1/1 [=====] - 0s 18ms/step
epoch 2864 - batch 8/10, discriminator_loss=0.000, generator_loss=5.517
1/1 [=====] - 0s 17ms/step
epoch 2864 - batch 9/10, discriminator_loss=0.000, generator_loss=6.144
1/1 [=====] - 0s 19ms/step
epoch 2864 - batch 10/10, discriminator_loss=0.001, generator_loss=5.456
1/1 [=====] - 0s 18ms/step
epoch 2865 - batch 1/10, discriminator_loss=0.000, generator_loss=5.803
1/1 [=====] - 0s 24ms/step
epoch 2865 - batch 2/10, discriminator_loss=0.000, generator_loss=5.939
1/1 [=====] - 0s 17ms/step
epoch 2865 - batch 3/10, discriminator_loss=0.000, generator_loss=6.317
1/1 [=====] - 0s 17ms/step
epoch 2865 - batch 4/10, discriminator_loss=0.000, generator_loss=6.171
1/1 [=====] - 0s 18ms/step
epoch 2865 - batch 5/10, discriminator_loss=0.000, generator_loss=5.615
1/1 [=====] - 0s 21ms/step
epoch 2865 - batch 6/10, discriminator_loss=0.000, generator_loss=4.887
1/1 [=====] - 0s 17ms/step
epoch 2865 - batch 7/10, discriminator_loss=0.000, generator_loss=6.426
1/1 [=====] - 0s 17ms/step
epoch 2865 - batch 8/10, discriminator_loss=0.000, generator_loss=4.481
1/1 [=====] - 0s 16ms/step
epoch 2865 - batch 9/10, discriminator_loss=0.000, generator_loss=3.619
1/1 [=====] - 0s 16ms/step
epoch 2865 - batch 10/10, discriminator_loss=0.000, generator_loss=3.675
1/1 [=====] - 0s 19ms/step
epoch 2866 - batch 1/10, discriminator_loss=0.013, generator_loss=3.176
1/1 [=====] - 0s 17ms/step
epoch 2866 - batch 2/10, discriminator_loss=0.000, generator_loss=3.876
1/1 [=====] - 0s 26ms/step
epoch 2866 - batch 3/10, discriminator_loss=0.000, generator_loss=3.893
1/1 [=====] - 0s 22ms/step
epoch 2866 - batch 4/10, discriminator_loss=0.001, generator_loss=3.109
1/1 [=====] - 0s 21ms/step
epoch 2866 - batch 5/10, discriminator_loss=0.000, generator_loss=4.078
1/1 [=====] - 0s 20ms/step
epoch 2866 - batch 6/10, discriminator_loss=0.000, generator_loss=2.877
1/1 [=====] - 0s 28ms/step
epoch 2866 - batch 7/10, discriminator_loss=0.023, generator_loss=3.630
1/1 [=====] - 0s 26ms/step
epoch 2866 - batch 8/10, discriminator_loss=0.016, generator_loss=1.834
1/1 [=====] - 0s 26ms/step
epoch 2866 - batch 9/10, discriminator_loss=0.035, generator_loss=3.074

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1/1 [=====] - 0s 23ms/step
epoch 2866 - batch 10/10, discriminator_loss=0.000, generator_loss=6.213
1/1 [=====] - 0s 26ms/step
epoch 2867 - batch 1/10, discriminator_loss=0.000, generator_loss=2.442
1/1 [=====] - 0s 25ms/step
epoch 2867 - batch 2/10, discriminator_loss=0.341, generator_loss=4.974
1/1 [=====] - 0s 16ms/step
epoch 2867 - batch 3/10, discriminator_loss=0.000, generator_loss=3.173
1/1 [=====] - 0s 17ms/step
epoch 2867 - batch 4/10, discriminator_loss=0.108, generator_loss=4.512
1/1 [=====] - 0s 18ms/step
epoch 2867 - batch 5/10, discriminator_loss=0.000, generator_loss=3.967
1/1 [=====] - 0s 19ms/step
epoch 2867 - batch 6/10, discriminator_loss=0.000, generator_loss=6.857
1/1 [=====] - 0s 22ms/step
epoch 2867 - batch 7/10, discriminator_loss=0.000, generator_loss=9.424
1/1 [=====] - 0s 23ms/step
epoch 2867 - batch 8/10, discriminator_loss=0.000, generator_loss=8.631
1/1 [=====] - 0s 23ms/step
epoch 2867 - batch 9/10, discriminator_loss=0.000, generator_loss=10.029
1/1 [=====] - 0s 26ms/step
epoch 2867 - batch 10/10, discriminator_loss=0.000, generator_loss=7.756
1/1 [=====] - 0s 22ms/step
epoch 2868 - batch 1/10, discriminator_loss=1.422, generator_loss=5.569
1/1 [=====] - 0s 23ms/step
epoch 2868 - batch 2/10, discriminator_loss=0.986, generator_loss=6.360
1/1 [=====] - 0s 17ms/step
epoch 2868 - batch 3/10, discriminator_loss=0.000, generator_loss=1.750
1/1 [=====] - 0s 16ms/step
epoch 2868 - batch 4/10, discriminator_loss=0.002, generator_loss=3.435
1/1 [=====] - 0s 16ms/step
epoch 2868 - batch 5/10, discriminator_loss=0.003, generator_loss=1.809
1/1 [=====] - 0s 19ms/step
epoch 2868 - batch 6/10, discriminator_loss=0.001, generator_loss=1.957
1/1 [=====] - 0s 16ms/step
epoch 2868 - batch 7/10, discriminator_loss=0.013, generator_loss=0.174
1/1 [=====] - 0s 18ms/step
epoch 2868 - batch 8/10, discriminator_loss=0.024, generator_loss=0.301
1/1 [=====] - 0s 16ms/step
epoch 2868 - batch 9/10, discriminator_loss=0.007, generator_loss=0.943
1/1 [=====] - 0s 18ms/step
epoch 2868 - batch 10/10, discriminator_loss=0.000, generator_loss=0.113
1/1 [=====] - 0s 22ms/step
epoch 2869 - batch 1/10, discriminator_loss=0.008, generator_loss=0.113
1/1 [=====] - 0s 23ms/step
epoch 2869 - batch 2/10, discriminator_loss=1.044, generator_loss=1.063
1/1 [=====] - 0s 16ms/step
epoch 2869 - batch 3/10, discriminator_loss=0.879, generator_loss=2.894

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1/1 [=====] - 0s 18ms/step
epoch 2869 - batch 4/10, discriminator_loss=0.286, generator_loss=11.535
1/1 [=====] - 0s 19ms/step
epoch 2869 - batch 5/10, discriminator_loss=0.000, generator_loss=18.354
1/1 [=====] - 0s 25ms/step
epoch 2869 - batch 6/10, discriminator_loss=0.000, generator_loss=24.217
1/1 [=====] - 0s 17ms/step
epoch 2869 - batch 7/10, discriminator_loss=0.000, generator_loss=26.116
1/1 [=====] - 0s 18ms/step
epoch 2869 - batch 8/10, discriminator_loss=0.000, generator_loss=30.120
1/1 [=====] - 0s 23ms/step
epoch 2869 - batch 9/10, discriminator_loss=0.000, generator_loss=32.475
1/1 [=====] - 0s 22ms/step
epoch 2869 - batch 10/10, discriminator_loss=0.000, generator_loss=33.070
1/1 [=====] - 0s 24ms/step
epoch 2870 - batch 1/10, discriminator_loss=0.000, generator_loss=37.851
1/1 [=====] - 0s 21ms/step
epoch 2870 - batch 2/10, discriminator_loss=0.000, generator_loss=36.716
1/1 [=====] - 0s 24ms/step
epoch 2870 - batch 3/10, discriminator_loss=1.895, generator_loss=36.414
1/1 [=====] - 0s 23ms/step
epoch 2870 - batch 4/10, discriminator_loss=0.000, generator_loss=37.507
1/1 [=====] - 0s 21ms/step
epoch 2870 - batch 5/10, discriminator_loss=2.928, generator_loss=34.487
1/1 [=====] - 0s 17ms/step
epoch 2870 - batch 6/10, discriminator_loss=0.000, generator_loss=31.059
1/1 [=====] - 0s 20ms/step
epoch 2870 - batch 7/10, discriminator_loss=2.885, generator_loss=29.539
1/1 [=====] - 0s 16ms/step
epoch 2870 - batch 8/10, discriminator_loss=2.335, generator_loss=28.192
1/1 [=====] - 0s 16ms/step
epoch 2870 - batch 9/10, discriminator_loss=0.000, generator_loss=24.013
1/1 [=====] - 0s 17ms/step
epoch 2870 - batch 10/10, discriminator_loss=0.000, generator_loss=22.381
1/1 [=====] - 0s 24ms/step
epoch 2871 - batch 1/10, discriminator_loss=0.000, generator_loss=20.093
1/1 [=====] - 0s 22ms/step
epoch 2871 - batch 2/10, discriminator_loss=0.000, generator_loss=19.483
1/1 [=====] - 0s 17ms/step
epoch 2871 - batch 3/10, discriminator_loss=0.000, generator_loss=18.754
1/1 [=====] - 0s 17ms/step
epoch 2871 - batch 4/10, discriminator_loss=0.000, generator_loss=16.639
1/1 [=====] - 0s 19ms/step
epoch 2871 - batch 5/10, discriminator_loss=0.000, generator_loss=15.849
1/1 [=====] - 0s 24ms/step
epoch 2871 - batch 6/10, discriminator_loss=0.000, generator_loss=13.424
1/1 [=====] - 0s 19ms/step
epoch 2871 - batch 7/10, discriminator_loss=0.000, generator_loss=14.256

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1/1 [=====] - 0s 27ms/step
epoch 2871 - batch 8/10, discriminator_loss=0.000, generator_loss=12.800
1/1 [=====] - 0s 22ms/step
epoch 2871 - batch 9/10, discriminator_loss=0.000, generator_loss=12.034
1/1 [=====] - 0s 19ms/step
epoch 2871 - batch 10/10, discriminator_loss=0.001, generator_loss=11.647
1/1 [=====] - 0s 20ms/step
epoch 2872 - batch 1/10, discriminator_loss=0.000, generator_loss=11.129
1/1 [=====] - 0s 21ms/step
epoch 2872 - batch 2/10, discriminator_loss=0.000, generator_loss=10.035
1/1 [=====] - 0s 22ms/step
epoch 2872 - batch 3/10, discriminator_loss=0.000, generator_loss=9.307
1/1 [=====] - 0s 17ms/step
epoch 2872 - batch 4/10, discriminator_loss=0.000, generator_loss=9.488
1/1 [=====] - 0s 17ms/step
epoch 2872 - batch 5/10, discriminator_loss=0.000, generator_loss=9.340
1/1 [=====] - 0s 16ms/step
epoch 2872 - batch 6/10, discriminator_loss=1.426, generator_loss=9.339
1/1 [=====] - 0s 16ms/step
epoch 2872 - batch 7/10, discriminator_loss=1.092, generator_loss=7.952
1/1 [=====] - 0s 23ms/step
epoch 2872 - batch 8/10, discriminator_loss=0.001, generator_loss=6.995
1/1 [=====] - 0s 24ms/step
epoch 2872 - batch 9/10, discriminator_loss=0.001, generator_loss=7.403
1/1 [=====] - 0s 23ms/step
epoch 2872 - batch 10/10, discriminator_loss=0.001, generator_loss=5.751
1/1 [=====] - 0s 27ms/step
epoch 2873 - batch 1/10, discriminator_loss=0.006, generator_loss=4.536
1/1 [=====] - 0s 21ms/step
epoch 2873 - batch 2/10, discriminator_loss=0.002, generator_loss=4.302
1/1 [=====] - 0s 19ms/step
epoch 2873 - batch 3/10, discriminator_loss=0.608, generator_loss=3.655
1/1 [=====] - 0s 18ms/step
epoch 2873 - batch 4/10, discriminator_loss=0.004, generator_loss=3.296
1/1 [=====] - 0s 37ms/step
epoch 2873 - batch 5/10, discriminator_loss=0.006, generator_loss=1.997
1/1 [=====] - 0s 20ms/step
epoch 2873 - batch 6/10, discriminator_loss=0.008, generator_loss=2.505
1/1 [=====] - 0s 18ms/step
epoch 2873 - batch 7/10, discriminator_loss=0.010, generator_loss=1.011
1/1 [=====] - 0s 22ms/step
epoch 2873 - batch 8/10, discriminator_loss=0.011, generator_loss=1.317
1/1 [=====] - 0s 20ms/step
epoch 2873 - batch 9/10, discriminator_loss=0.013, generator_loss=0.389
1/1 [=====] - 0s 16ms/step
epoch 2873 - batch 10/10, discriminator_loss=0.004, generator_loss=0.894
1/1 [=====] - 0s 20ms/step
epoch 2874 - batch 1/10, discriminator_loss=0.004, generator_loss=0.002

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1/1 [=====] - 0s 23ms/step
epoch 2874 - batch 2/10, discriminator_loss=0.015, generator_loss=0.225
1/1 [=====] - 0s 22ms/step
epoch 2874 - batch 3/10, discriminator_loss=0.005, generator_loss=0.807
1/1 [=====] - 0s 19ms/step
epoch 2874 - batch 4/10, discriminator_loss=0.017, generator_loss=1.000
1/1 [=====] - 0s 17ms/step
epoch 2874 - batch 5/10, discriminator_loss=0.006, generator_loss=0.865
1/1 [=====] - 0s 19ms/step
epoch 2874 - batch 6/10, discriminator_loss=0.091, generator_loss=1.752
1/1 [=====] - 0s 16ms/step
epoch 2874 - batch 7/10, discriminator_loss=0.007, generator_loss=1.711
1/1 [=====] - 0s 16ms/step
epoch 2874 - batch 8/10, discriminator_loss=0.004, generator_loss=3.735
1/1 [=====] - 0s 29ms/step
epoch 2874 - batch 9/10, discriminator_loss=0.017, generator_loss=4.729
1/1 [=====] - 0s 18ms/step
epoch 2874 - batch 10/10, discriminator_loss=0.002, generator_loss=2.226
1/1 [=====] - 0s 21ms/step
epoch 2875 - batch 1/10, discriminator_loss=0.003, generator_loss=3.148
1/1 [=====] - 0s 25ms/step
epoch 2875 - batch 2/10, discriminator_loss=0.003, generator_loss=1.892
1/1 [=====] - 0s 18ms/step
epoch 2875 - batch 3/10, discriminator_loss=0.001, generator_loss=0.679
1/1 [=====] - 0s 19ms/step
epoch 2875 - batch 4/10, discriminator_loss=0.005, generator_loss=1.023
1/1 [=====] - 0s 24ms/step
epoch 2875 - batch 5/10, discriminator_loss=0.001, generator_loss=0.300
1/1 [=====] - 0s 24ms/step
epoch 2875 - batch 6/10, discriminator_loss=0.001, generator_loss=0.605
1/1 [=====] - 0s 22ms/step
epoch 2875 - batch 7/10, discriminator_loss=0.009, generator_loss=0.413
1/1 [=====] - 0s 18ms/step
epoch 2875 - batch 8/10, discriminator_loss=0.003, generator_loss=0.590
1/1 [=====] - 0s 18ms/step
epoch 2875 - batch 9/10, discriminator_loss=0.003, generator_loss=0.399
1/1 [=====] - 0s 22ms/step
epoch 2875 - batch 10/10, discriminator_loss=0.008, generator_loss=0.302
1/1 [=====] - 0s 18ms/step
epoch 2876 - batch 1/10, discriminator_loss=0.001, generator_loss=0.099
1/1 [=====] - 0s 19ms/step
epoch 2876 - batch 2/10, discriminator_loss=0.001, generator_loss=0.054
1/1 [=====] - 0s 22ms/step
epoch 2876 - batch 3/10, discriminator_loss=0.013, generator_loss=0.180
1/1 [=====] - 0s 17ms/step
epoch 2876 - batch 4/10, discriminator_loss=0.000, generator_loss=0.295
1/1 [=====] - 0s 17ms/step
epoch 2876 - batch 5/10, discriminator_loss=0.001, generator_loss=0.119

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1/1 [=====] - 0s 21ms/step
epoch 2876 - batch 6/10, discriminator_loss=0.008, generator_loss=0.049
1/1 [=====] - 0s 21ms/step
epoch 2876 - batch 7/10, discriminator_loss=0.002, generator_loss=0.019
1/1 [=====] - 0s 18ms/step
epoch 2876 - batch 8/10, discriminator_loss=0.002, generator_loss=0.427
1/1 [=====] - 0s 22ms/step
epoch 2876 - batch 9/10, discriminator_loss=0.002, generator_loss=0.288
1/1 [=====] - 0s 21ms/step
epoch 2876 - batch 10/10, discriminator_loss=0.004, generator_loss=0.146
1/1 [=====] - 0s 22ms/step
epoch 2877 - batch 1/10, discriminator_loss=0.413, generator_loss=0.029
1/1 [=====] - 0s 21ms/step
epoch 2877 - batch 2/10, discriminator_loss=0.002, generator_loss=0.811
1/1 [=====] - 0s 16ms/step
epoch 2877 - batch 3/10, discriminator_loss=0.001, generator_loss=0.031
1/1 [=====] - 0s 16ms/step
epoch 2877 - batch 4/10, discriminator_loss=0.000, generator_loss=0.092
1/1 [=====] - 0s 18ms/step
epoch 2877 - batch 5/10, discriminator_loss=0.004, generator_loss=0.184
1/1 [=====] - 0s 21ms/step
epoch 2877 - batch 6/10, discriminator_loss=0.001, generator_loss=0.008
1/1 [=====] - 0s 25ms/step
epoch 2877 - batch 7/10, discriminator_loss=0.002, generator_loss=0.037
1/1 [=====] - 0s 20ms/step
epoch 2877 - batch 8/10, discriminator_loss=0.002, generator_loss=0.312
1/1 [=====] - 0s 22ms/step
epoch 2877 - batch 9/10, discriminator_loss=0.003, generator_loss=0.033
1/1 [=====] - 0s 23ms/step
epoch 2877 - batch 10/10, discriminator_loss=0.000, generator_loss=0.059
1/1 [=====] - 0s 24ms/step
epoch 2878 - batch 1/10, discriminator_loss=0.001, generator_loss=0.055
1/1 [=====] - 0s 21ms/step
epoch 2878 - batch 2/10, discriminator_loss=0.000, generator_loss=0.065
1/1 [=====] - 0s 24ms/step
epoch 2878 - batch 3/10, discriminator_loss=0.001, generator_loss=0.026
1/1 [=====] - 0s 21ms/step
epoch 2878 - batch 4/10, discriminator_loss=0.000, generator_loss=0.151
1/1 [=====] - 0s 18ms/step
epoch 2878 - batch 5/10, discriminator_loss=0.001, generator_loss=0.089
1/1 [=====] - 0s 16ms/step
epoch 2878 - batch 6/10, discriminator_loss=0.001, generator_loss=0.032
1/1 [=====] - 0s 17ms/step
epoch 2878 - batch 7/10, discriminator_loss=0.000, generator_loss=0.030
1/1 [=====] - 0s 16ms/step
epoch 2878 - batch 8/10, discriminator_loss=0.001, generator_loss=0.383
1/1 [=====] - 0s 16ms/step
epoch 2878 - batch 9/10, discriminator_loss=0.002, generator_loss=0.333

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1/1 [=====] - 0s 20ms/step
epoch 2878 - batch 10/10, discriminator_loss=0.001, generator_loss=0.215
1/1 [=====] - 0s 20ms/step
epoch 2879 - batch 1/10, discriminator_loss=0.012, generator_loss=0.165
1/1 [=====] - 0s 18ms/step
epoch 2879 - batch 2/10, discriminator_loss=0.001, generator_loss=0.171
1/1 [=====] - 0s 24ms/step
epoch 2879 - batch 3/10, discriminator_loss=0.001, generator_loss=0.123
1/1 [=====] - 0s 20ms/step
epoch 2879 - batch 4/10, discriminator_loss=0.001, generator_loss=0.007
1/1 [=====] - 0s 22ms/step
epoch 2879 - batch 5/10, discriminator_loss=0.605, generator_loss=0.245
1/1 [=====] - 0s 21ms/step
epoch 2879 - batch 6/10, discriminator_loss=0.000, generator_loss=0.163
1/1 [=====] - 0s 17ms/step
epoch 2879 - batch 7/10, discriminator_loss=0.464, generator_loss=0.007
1/1 [=====] - 0s 17ms/step
epoch 2879 - batch 8/10, discriminator_loss=0.001, generator_loss=0.146
1/1 [=====] - 0s 19ms/step
epoch 2879 - batch 9/10, discriminator_loss=0.000, generator_loss=0.359
1/1 [=====] - 0s 17ms/step
epoch 2879 - batch 10/10, discriminator_loss=0.000, generator_loss=0.292
1/1 [=====] - 0s 19ms/step
epoch 2880 - batch 1/10, discriminator_loss=0.387, generator_loss=0.308
1/1 [=====] - 0s 22ms/step
epoch 2880 - batch 2/10, discriminator_loss=0.000, generator_loss=0.453
1/1 [=====] - 0s 24ms/step
epoch 2880 - batch 3/10, discriminator_loss=0.000, generator_loss=0.263
1/1 [=====] - 0s 19ms/step
epoch 2880 - batch 4/10, discriminator_loss=0.335, generator_loss=0.076
1/1 [=====] - 0s 17ms/step
epoch 2880 - batch 5/10, discriminator_loss=0.000, generator_loss=0.163
1/1 [=====] - 0s 22ms/step
epoch 2880 - batch 6/10, discriminator_loss=0.001, generator_loss=0.017
1/1 [=====] - 0s 18ms/step
epoch 2880 - batch 7/10, discriminator_loss=0.001, generator_loss=0.049
1/1 [=====] - 0s 19ms/step
epoch 2880 - batch 8/10, discriminator_loss=0.000, generator_loss=0.089
1/1 [=====] - 0s 17ms/step
epoch 2880 - batch 9/10, discriminator_loss=0.000, generator_loss=0.060
1/1 [=====] - 0s 22ms/step
epoch 2880 - batch 10/10, discriminator_loss=0.001, generator_loss=0.010
1/1 [=====] - 0s 19ms/step
epoch 2881 - batch 1/10, discriminator_loss=0.000, generator_loss=0.124
1/1 [=====] - 0s 23ms/step
epoch 2881 - batch 2/10, discriminator_loss=0.000, generator_loss=0.026
1/1 [=====] - 0s 17ms/step
epoch 2881 - batch 3/10, discriminator_loss=0.000, generator_loss=0.097

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1/1 [=====] - 0s 16ms/step
epoch 2881 - batch 4/10, discriminator_loss=0.000, generator_loss=0.141
1/1 [=====] - 0s 19ms/step
epoch 2881 - batch 5/10, discriminator_loss=0.000, generator_loss=0.153
1/1 [=====] - 0s 16ms/step
epoch 2881 - batch 6/10, discriminator_loss=0.000, generator_loss=0.096
1/1 [=====] - 0s 16ms/step
epoch 2881 - batch 7/10, discriminator_loss=0.008, generator_loss=0.410
1/1 [=====] - 0s 19ms/step
epoch 2881 - batch 8/10, discriminator_loss=0.000, generator_loss=0.034
1/1 [=====] - 0s 22ms/step
epoch 2881 - batch 9/10, discriminator_loss=0.226, generator_loss=0.062
1/1 [=====] - 0s 20ms/step
epoch 2881 - batch 10/10, discriminator_loss=0.000, generator_loss=0.408
4/4 [=====] - 0s 54ms/step
Accuracy réelle : 99%, fausse : 85%
1/1 [=====] - 0s 16ms/step
epoch 2882 - batch 1/10, discriminator_loss=0.000, generator_loss=0.058
1/1 [=====] - 0s 16ms/step
epoch 2882 - batch 2/10, discriminator_loss=0.000, generator_loss=0.095
1/1 [=====] - 0s 22ms/step
epoch 2882 - batch 3/10, discriminator_loss=0.001, generator_loss=0.573
1/1 [=====] - 0s 23ms/step
epoch 2882 - batch 4/10, discriminator_loss=0.000, generator_loss=0.127
1/1 [=====] - 0s 26ms/step
epoch 2882 - batch 5/10, discriminator_loss=0.000, generator_loss=0.103
1/1 [=====] - 0s 17ms/step
epoch 2882 - batch 6/10, discriminator_loss=0.001, generator_loss=0.065
1/1 [=====] - 0s 16ms/step
epoch 2882 - batch 7/10, discriminator_loss=0.002, generator_loss=0.236
1/1 [=====] - 0s 17ms/step
epoch 2882 - batch 8/10, discriminator_loss=0.000, generator_loss=0.037
1/1 [=====] - 0s 16ms/step
epoch 2882 - batch 9/10, discriminator_loss=0.000, generator_loss=0.030
1/1 [=====] - 0s 18ms/step
epoch 2882 - batch 10/10, discriminator_loss=0.001, generator_loss=0.033
1/1 [=====] - 0s 17ms/step
epoch 2883 - batch 1/10, discriminator_loss=0.001, generator_loss=0.179
1/1 [=====] - 0s 17ms/step
epoch 2883 - batch 2/10, discriminator_loss=0.000, generator_loss=0.082
1/1 [=====] - 0s 17ms/step
epoch 2883 - batch 3/10, discriminator_loss=0.000, generator_loss=0.036
1/1 [=====] - 0s 17ms/step
epoch 2883 - batch 4/10, discriminator_loss=0.001, generator_loss=0.155
1/1 [=====] - 0s 26ms/step
epoch 2883 - batch 5/10, discriminator_loss=0.001, generator_loss=0.235
1/1 [=====] - 0s 16ms/step
epoch 2883 - batch 6/10, discriminator_loss=0.001, generator_loss=0.285

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1/1 [=====] - 0s 17ms/step
epoch 2883 - batch 7/10, discriminator_loss=0.000, generator_loss=0.273
1/1 [=====] - 0s 16ms/step
epoch 2883 - batch 8/10, discriminator_loss=0.000, generator_loss=0.229
1/1 [=====] - 0s 16ms/step
epoch 2883 - batch 9/10, discriminator_loss=0.001, generator_loss=0.156
1/1 [=====] - 0s 18ms/step
epoch 2883 - batch 10/10, discriminator_loss=0.000, generator_loss=0.250
1/1 [=====] - 0s 17ms/step
epoch 2884 - batch 1/10, discriminator_loss=0.000, generator_loss=0.381
1/1 [=====] - 0s 16ms/step
epoch 2884 - batch 2/10, discriminator_loss=0.000, generator_loss=0.173
1/1 [=====] - 0s 24ms/step
epoch 2884 - batch 3/10, discriminator_loss=0.000, generator_loss=0.459
1/1 [=====] - 0s 19ms/step
epoch 2884 - batch 4/10, discriminator_loss=0.001, generator_loss=0.467
1/1 [=====] - 0s 31ms/step
epoch 2884 - batch 5/10, discriminator_loss=0.000, generator_loss=0.936
1/1 [=====] - 0s 21ms/step
epoch 2884 - batch 6/10, discriminator_loss=0.201, generator_loss=0.321
1/1 [=====] - 0s 19ms/step
epoch 2884 - batch 7/10, discriminator_loss=0.000, generator_loss=0.205
1/1 [=====] - 0s 17ms/step
epoch 2884 - batch 8/10, discriminator_loss=0.000, generator_loss=0.113
1/1 [=====] - 0s 20ms/step
epoch 2884 - batch 9/10, discriminator_loss=0.000, generator_loss=0.165
1/1 [=====] - 0s 25ms/step
epoch 2884 - batch 10/10, discriminator_loss=0.000, generator_loss=0.116
1/1 [=====] - 0s 23ms/step
epoch 2885 - batch 1/10, discriminator_loss=0.306, generator_loss=0.134
1/1 [=====] - 0s 25ms/step
epoch 2885 - batch 2/10, discriminator_loss=0.001, generator_loss=0.098
1/1 [=====] - 0s 23ms/step
epoch 2885 - batch 3/10, discriminator_loss=0.000, generator_loss=0.102
1/1 [=====] - 0s 24ms/step
epoch 2885 - batch 4/10, discriminator_loss=0.001, generator_loss=0.094
1/1 [=====] - 0s 23ms/step
epoch 2885 - batch 5/10, discriminator_loss=0.277, generator_loss=0.088
1/1 [=====] - 0s 21ms/step
epoch 2885 - batch 6/10, discriminator_loss=0.008, generator_loss=0.117
1/1 [=====] - 0s 16ms/step
epoch 2885 - batch 7/10, discriminator_loss=0.001, generator_loss=0.156
1/1 [=====] - 0s 16ms/step
epoch 2885 - batch 8/10, discriminator_loss=0.001, generator_loss=0.166
1/1 [=====] - 0s 16ms/step
epoch 2885 - batch 9/10, discriminator_loss=0.001, generator_loss=0.062
1/1 [=====] - 0s 20ms/step
epoch 2885 - batch 10/10, discriminator_loss=0.257, generator_loss=0.092

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1/1 [=====] - 0s 20ms/step
epoch 2886 - batch 1/10, discriminator_loss=0.003, generator_loss=0.212
1/1 [=====] - 0s 17ms/step
epoch 2886 - batch 2/10, discriminator_loss=0.000, generator_loss=0.121
1/1 [=====] - 0s 17ms/step
epoch 2886 - batch 3/10, discriminator_loss=0.002, generator_loss=0.054
1/1 [=====] - 0s 16ms/step
epoch 2886 - batch 4/10, discriminator_loss=0.005, generator_loss=0.192
1/1 [=====] - 0s 21ms/step
epoch 2886 - batch 5/10, discriminator_loss=0.170, generator_loss=0.114
1/1 [=====] - 0s 20ms/step
epoch 2886 - batch 6/10, discriminator_loss=0.000, generator_loss=0.090
1/1 [=====] - 0s 18ms/step
epoch 2886 - batch 7/10, discriminator_loss=0.007, generator_loss=0.099
1/1 [=====] - 0s 16ms/step
epoch 2886 - batch 8/10, discriminator_loss=0.002, generator_loss=0.296
1/1 [=====] - 0s 16ms/step
epoch 2886 - batch 9/10, discriminator_loss=0.001, generator_loss=0.035
1/1 [=====] - 0s 19ms/step
epoch 2886 - batch 10/10, discriminator_loss=0.019, generator_loss=0.071
1/1 [=====] - 0s 16ms/step
epoch 2887 - batch 1/10, discriminator_loss=0.009, generator_loss=0.229
1/1 [=====] - 0s 16ms/step
epoch 2887 - batch 2/10, discriminator_loss=0.002, generator_loss=0.092
1/1 [=====] - 0s 23ms/step
epoch 2887 - batch 3/10, discriminator_loss=0.132, generator_loss=0.221
1/1 [=====] - 0s 24ms/step
epoch 2887 - batch 4/10, discriminator_loss=0.005, generator_loss=0.207
1/1 [=====] - 0s 18ms/step
epoch 2887 - batch 5/10, discriminator_loss=0.002, generator_loss=0.225
1/1 [=====] - 0s 19ms/step
epoch 2887 - batch 6/10, discriminator_loss=0.027, generator_loss=0.296
1/1 [=====] - 0s 18ms/step
epoch 2887 - batch 7/10, discriminator_loss=0.002, generator_loss=0.787
1/1 [=====] - 0s 19ms/step
epoch 2887 - batch 8/10, discriminator_loss=0.000, generator_loss=1.752
1/1 [=====] - 0s 21ms/step
epoch 2887 - batch 9/10, discriminator_loss=0.010, generator_loss=0.993
1/1 [=====] - 0s 26ms/step
epoch 2887 - batch 10/10, discriminator_loss=0.001, generator_loss=2.185
1/1 [=====] - 0s 18ms/step
epoch 2888 - batch 1/10, discriminator_loss=0.017, generator_loss=2.065
1/1 [=====] - 0s 18ms/step
epoch 2888 - batch 2/10, discriminator_loss=0.003, generator_loss=3.575
1/1 [=====] - 0s 23ms/step
epoch 2888 - batch 3/10, discriminator_loss=0.003, generator_loss=3.020
1/1 [=====] - 0s 22ms/step
epoch 2888 - batch 4/10, discriminator_loss=0.000, generator_loss=3.303

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1/1 [=====] - 0s 22ms/step
epoch 2888 - batch 5/10, discriminator_loss=0.010, generator_loss=3.470
1/1 [=====] - 0s 33ms/step
epoch 2888 - batch 6/10, discriminator_loss=0.030, generator_loss=2.792
1/1 [=====] - 0s 21ms/step
epoch 2888 - batch 7/10, discriminator_loss=0.000, generator_loss=2.585
1/1 [=====] - 0s 23ms/step
epoch 2888 - batch 8/10, discriminator_loss=0.120, generator_loss=2.758
1/1 [=====] - 0s 28ms/step
epoch 2888 - batch 9/10, discriminator_loss=0.004, generator_loss=2.575
1/1 [=====] - 0s 23ms/step
epoch 2888 - batch 10/10, discriminator_loss=0.001, generator_loss=1.879
1/1 [=====] - 0s 22ms/step
epoch 2889 - batch 1/10, discriminator_loss=0.001, generator_loss=2.143
1/1 [=====] - 0s 36ms/step
epoch 2889 - batch 2/10, discriminator_loss=0.004, generator_loss=1.712
1/1 [=====] - 0s 21ms/step
epoch 2889 - batch 3/10, discriminator_loss=0.003, generator_loss=1.485
1/1 [=====] - 0s 16ms/step
epoch 2889 - batch 4/10, discriminator_loss=0.155, generator_loss=1.630
1/1 [=====] - 0s 16ms/step
epoch 2889 - batch 5/10, discriminator_loss=0.033, generator_loss=1.294
1/1 [=====] - 0s 18ms/step
epoch 2889 - batch 6/10, discriminator_loss=0.009, generator_loss=1.065
1/1 [=====] - 0s 17ms/step
epoch 2889 - batch 7/10, discriminator_loss=0.007, generator_loss=1.118
1/1 [=====] - 0s 22ms/step
epoch 2889 - batch 8/10, discriminator_loss=0.230, generator_loss=1.262
1/1 [=====] - 0s 21ms/step
epoch 2889 - batch 9/10, discriminator_loss=0.271, generator_loss=1.084
1/1 [=====] - 0s 32ms/step
epoch 2889 - batch 10/10, discriminator_loss=0.002, generator_loss=1.115
1/1 [=====] - 0s 18ms/step
epoch 2890 - batch 1/10, discriminator_loss=0.002, generator_loss=0.891
1/1 [=====] - 0s 17ms/step
epoch 2890 - batch 2/10, discriminator_loss=0.002, generator_loss=0.869
1/1 [=====] - 0s 19ms/step
epoch 2890 - batch 3/10, discriminator_loss=0.009, generator_loss=1.286
1/1 [=====] - 0s 17ms/step
epoch 2890 - batch 4/10, discriminator_loss=0.000, generator_loss=1.009
1/1 [=====] - 0s 17ms/step
epoch 2890 - batch 5/10, discriminator_loss=0.028, generator_loss=1.195
1/1 [=====] - 0s 16ms/step
epoch 2890 - batch 6/10, discriminator_loss=0.743, generator_loss=0.957
1/1 [=====] - 0s 20ms/step
epoch 2890 - batch 7/10, discriminator_loss=0.004, generator_loss=0.983
1/1 [=====] - 0s 17ms/step
epoch 2890 - batch 8/10, discriminator_loss=0.114, generator_loss=1.096

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1/1 [=====] - 0s 21ms/step
epoch 2890 - batch 9/10, discriminator_loss=0.338, generator_loss=1.696
1/1 [=====] - 0s 25ms/step
epoch 2890 - batch 10/10, discriminator_loss=0.001, generator_loss=1.527
1/1 [=====] - 0s 23ms/step
epoch 2891 - batch 1/10, discriminator_loss=0.000, generator_loss=1.260
1/1 [=====] - 0s 27ms/step
epoch 2891 - batch 2/10, discriminator_loss=0.000, generator_loss=1.873
1/1 [=====] - 0s 23ms/step
epoch 2891 - batch 3/10, discriminator_loss=0.001, generator_loss=1.436
1/1 [=====] - 0s 22ms/step
epoch 2891 - batch 4/10, discriminator_loss=0.000, generator_loss=1.410
1/1 [=====] - 0s 22ms/step
epoch 2891 - batch 5/10, discriminator_loss=0.001, generator_loss=1.242
1/1 [=====] - 0s 17ms/step
epoch 2891 - batch 6/10, discriminator_loss=0.678, generator_loss=1.165
1/1 [=====] - 0s 16ms/step
epoch 2891 - batch 7/10, discriminator_loss=0.006, generator_loss=1.165
1/1 [=====] - 0s 16ms/step
epoch 2891 - batch 8/10, discriminator_loss=0.809, generator_loss=1.257
1/1 [=====] - 0s 16ms/step
epoch 2891 - batch 9/10, discriminator_loss=0.024, generator_loss=1.283
1/1 [=====] - 0s 23ms/step
epoch 2891 - batch 10/10, discriminator_loss=0.698, generator_loss=1.165
1/1 [=====] - 0s 17ms/step
epoch 2892 - batch 1/10, discriminator_loss=0.029, generator_loss=1.077
1/1 [=====] - 0s 17ms/step
epoch 2892 - batch 2/10, discriminator_loss=0.022, generator_loss=1.119
1/1 [=====] - 0s 19ms/step
epoch 2892 - batch 3/10, discriminator_loss=0.001, generator_loss=1.111
1/1 [=====] - 0s 22ms/step
epoch 2892 - batch 4/10, discriminator_loss=0.020, generator_loss=1.110
1/1 [=====] - 0s 17ms/step
epoch 2892 - batch 5/10, discriminator_loss=0.069, generator_loss=1.115
1/1 [=====] - 0s 18ms/step
epoch 2892 - batch 6/10, discriminator_loss=0.001, generator_loss=1.084
1/1 [=====] - 0s 20ms/step
epoch 2892 - batch 7/10, discriminator_loss=0.029, generator_loss=1.110
1/1 [=====] - 0s 24ms/step
epoch 2892 - batch 8/10, discriminator_loss=0.266, generator_loss=1.152
1/1 [=====] - 0s 21ms/step
epoch 2892 - batch 9/10, discriminator_loss=0.001, generator_loss=1.112
1/1 [=====] - 0s 20ms/step
epoch 2892 - batch 10/10, discriminator_loss=0.153, generator_loss=1.008
1/1 [=====] - 0s 22ms/step
epoch 2893 - batch 1/10, discriminator_loss=0.035, generator_loss=1.035
1/1 [=====] - 0s 17ms/step
epoch 2893 - batch 2/10, discriminator_loss=0.007, generator_loss=1.118

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1/1 [=====] - 0s 22ms/step
epoch 2893 - batch 3/10, discriminator_loss=0.004, generator_loss=1.138
1/1 [=====] - 0s 17ms/step
epoch 2893 - batch 4/10, discriminator_loss=0.016, generator_loss=1.109
1/1 [=====] - 0s 18ms/step
epoch 2893 - batch 5/10, discriminator_loss=0.001, generator_loss=1.237
1/1 [=====] - 0s 18ms/step
epoch 2893 - batch 6/10, discriminator_loss=0.023, generator_loss=1.109
1/1 [=====] - 0s 17ms/step
epoch 2893 - batch 7/10, discriminator_loss=0.028, generator_loss=1.014
1/1 [=====] - 0s 16ms/step
epoch 2893 - batch 8/10, discriminator_loss=0.009, generator_loss=1.109
1/1 [=====] - 0s 18ms/step
epoch 2893 - batch 9/10, discriminator_loss=0.041, generator_loss=1.123
1/1 [=====] - 0s 16ms/step
epoch 2893 - batch 10/10, discriminator_loss=0.000, generator_loss=1.274
1/1 [=====] - 0s 17ms/step
epoch 2894 - batch 1/10, discriminator_loss=0.000, generator_loss=1.088
1/1 [=====] - 0s 16ms/step
epoch 2894 - batch 2/10, discriminator_loss=0.352, generator_loss=1.126
1/1 [=====] - 0s 17ms/step
epoch 2894 - batch 3/10, discriminator_loss=0.000, generator_loss=1.194
1/1 [=====] - 0s 29ms/step
epoch 2894 - batch 4/10, discriminator_loss=0.000, generator_loss=1.143
1/1 [=====] - 0s 19ms/step
epoch 2894 - batch 5/10, discriminator_loss=0.015, generator_loss=1.089
1/1 [=====] - 0s 16ms/step
epoch 2894 - batch 6/10, discriminator_loss=0.001, generator_loss=1.174
1/1 [=====] - 0s 19ms/step
epoch 2894 - batch 7/10, discriminator_loss=0.002, generator_loss=1.129
1/1 [=====] - 0s 17ms/step
epoch 2894 - batch 8/10, discriminator_loss=0.001, generator_loss=1.109
1/1 [=====] - 0s 18ms/step
epoch 2894 - batch 9/10, discriminator_loss=0.001, generator_loss=1.212
1/1 [=====] - 0s 17ms/step
epoch 2894 - batch 10/10, discriminator_loss=0.002, generator_loss=1.158
1/1 [=====] - 0s 18ms/step
epoch 2895 - batch 1/10, discriminator_loss=0.003, generator_loss=1.343
1/1 [=====] - 0s 18ms/step
epoch 2895 - batch 2/10, discriminator_loss=0.003, generator_loss=1.109
1/1 [=====] - 0s 18ms/step
epoch 2895 - batch 3/10, discriminator_loss=0.009, generator_loss=1.158
1/1 [=====] - 0s 18ms/step
epoch 2895 - batch 4/10, discriminator_loss=0.023, generator_loss=1.189
1/1 [=====] - 0s 17ms/step
epoch 2895 - batch 5/10, discriminator_loss=0.007, generator_loss=1.159
1/1 [=====] - 0s 16ms/step
epoch 2895 - batch 6/10, discriminator_loss=0.000, generator_loss=1.122

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1/1 [=====] - 0s 26ms/step
epoch 2895 - batch 7/10, discriminator_loss=0.001, generator_loss=1.075
1/1 [=====] - 0s 19ms/step
epoch 2895 - batch 8/10, discriminator_loss=0.000, generator_loss=1.030
1/1 [=====] - 0s 24ms/step
epoch 2895 - batch 9/10, discriminator_loss=0.000, generator_loss=1.213
1/1 [=====] - 0s 20ms/step
epoch 2895 - batch 10/10, discriminator_loss=0.000, generator_loss=1.219
1/1 [=====] - 0s 21ms/step
epoch 2896 - batch 1/10, discriminator_loss=0.001, generator_loss=1.167
1/1 [=====] - 0s 16ms/step
epoch 2896 - batch 2/10, discriminator_loss=0.057, generator_loss=1.046
1/1 [=====] - 0s 17ms/step
epoch 2896 - batch 3/10, discriminator_loss=0.000, generator_loss=1.155
1/1 [=====] - 0s 28ms/step
epoch 2896 - batch 4/10, discriminator_loss=0.222, generator_loss=1.156
1/1 [=====] - 0s 17ms/step
epoch 2896 - batch 5/10, discriminator_loss=0.029, generator_loss=1.146
1/1 [=====] - 0s 18ms/step
epoch 2896 - batch 6/10, discriminator_loss=0.001, generator_loss=1.207
1/1 [=====] - 0s 17ms/step
epoch 2896 - batch 7/10, discriminator_loss=0.390, generator_loss=1.162
1/1 [=====] - 0s 16ms/step
epoch 2896 - batch 8/10, discriminator_loss=0.006, generator_loss=1.127
1/1 [=====] - 0s 18ms/step
epoch 2896 - batch 9/10, discriminator_loss=0.006, generator_loss=1.123
1/1 [=====] - 0s 17ms/step
epoch 2896 - batch 10/10, discriminator_loss=0.002, generator_loss=1.108
1/1 [=====] - 0s 20ms/step
epoch 2897 - batch 1/10, discriminator_loss=0.052, generator_loss=1.037
1/1 [=====] - 0s 22ms/step
epoch 2897 - batch 2/10, discriminator_loss=0.002, generator_loss=1.116
1/1 [=====] - 0s 24ms/step
epoch 2897 - batch 3/10, discriminator_loss=0.263, generator_loss=1.120
1/1 [=====] - 0s 17ms/step
epoch 2897 - batch 4/10, discriminator_loss=0.004, generator_loss=1.153
1/1 [=====] - 0s 23ms/step
epoch 2897 - batch 5/10, discriminator_loss=0.001, generator_loss=1.019
1/1 [=====] - 0s 39ms/step
epoch 2897 - batch 6/10, discriminator_loss=0.001, generator_loss=1.109
1/1 [=====] - 0s 29ms/step
epoch 2897 - batch 7/10, discriminator_loss=0.024, generator_loss=1.156
1/1 [=====] - 0s 16ms/step
epoch 2897 - batch 8/10, discriminator_loss=0.002, generator_loss=1.133
1/1 [=====] - 0s 18ms/step
epoch 2897 - batch 9/10, discriminator_loss=0.002, generator_loss=1.121
1/1 [=====] - 0s 21ms/step
epoch 2897 - batch 10/10, discriminator_loss=0.012, generator_loss=1.111

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1/1 [=====] - 0s 25ms/step
epoch 2898 - batch 1/10, discriminator_loss=0.003, generator_loss=1.085
1/1 [=====] - 0s 24ms/step
epoch 2898 - batch 2/10, discriminator_loss=0.121, generator_loss=1.534
1/1 [=====] - 0s 17ms/step
epoch 2898 - batch 3/10, discriminator_loss=0.002, generator_loss=1.131
1/1 [=====] - 0s 17ms/step
epoch 2898 - batch 4/10, discriminator_loss=0.113, generator_loss=1.113
1/1 [=====] - 0s 17ms/step
epoch 2898 - batch 5/10, discriminator_loss=0.001, generator_loss=1.141
1/1 [=====] - 0s 17ms/step
epoch 2898 - batch 6/10, discriminator_loss=0.016, generator_loss=1.140
1/1 [=====] - 0s 17ms/step
epoch 2898 - batch 7/10, discriminator_loss=0.003, generator_loss=1.166
1/1 [=====] - 0s 17ms/step
epoch 2898 - batch 8/10, discriminator_loss=0.003, generator_loss=1.130
1/1 [=====] - 0s 22ms/step
epoch 2898 - batch 9/10, discriminator_loss=0.003, generator_loss=1.267
1/1 [=====] - 0s 23ms/step
epoch 2898 - batch 10/10, discriminator_loss=0.006, generator_loss=1.134
1/1 [=====] - 0s 27ms/step
epoch 2899 - batch 1/10, discriminator_loss=0.026, generator_loss=1.120
1/1 [=====] - 0s 24ms/step
epoch 2899 - batch 2/10, discriminator_loss=0.002, generator_loss=1.138
1/1 [=====] - 0s 20ms/step
epoch 2899 - batch 3/10, discriminator_loss=0.000, generator_loss=1.136
1/1 [=====] - 0s 29ms/step
epoch 2899 - batch 4/10, discriminator_loss=0.002, generator_loss=1.288
1/1 [=====] - 0s 20ms/step
epoch 2899 - batch 5/10, discriminator_loss=0.004, generator_loss=1.253
1/1 [=====] - 0s 19ms/step
epoch 2899 - batch 6/10, discriminator_loss=0.002, generator_loss=1.168
1/1 [=====] - 0s 21ms/step
epoch 2899 - batch 7/10, discriminator_loss=0.012, generator_loss=1.263
1/1 [=====] - 0s 22ms/step
epoch 2899 - batch 8/10, discriminator_loss=0.006, generator_loss=1.138
1/1 [=====] - 0s 18ms/step
epoch 2899 - batch 9/10, discriminator_loss=0.004, generator_loss=1.236
1/1 [=====] - 0s 22ms/step
epoch 2899 - batch 10/10, discriminator_loss=0.002, generator_loss=1.183
1/1 [=====] - 0s 30ms/step
epoch 2900 - batch 1/10, discriminator_loss=0.006, generator_loss=1.166
1/1 [=====] - 0s 22ms/step
epoch 2900 - batch 2/10, discriminator_loss=0.002, generator_loss=1.538
1/1 [=====] - 0s 16ms/step
epoch 2900 - batch 3/10, discriminator_loss=0.011, generator_loss=1.229
1/1 [=====] - 0s 17ms/step
epoch 2900 - batch 4/10, discriminator_loss=0.333, generator_loss=1.195

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1/1 [=====] - 0s 19ms/step
epoch 2900 - batch 5/10, discriminator_loss=0.001, generator_loss=1.186
1/1 [=====] - 0s 19ms/step
epoch 2900 - batch 6/10, discriminator_loss=0.005, generator_loss=1.259
1/1 [=====] - 0s 17ms/step
epoch 2900 - batch 7/10, discriminator_loss=0.002, generator_loss=1.320
1/1 [=====] - 0s 19ms/step
epoch 2900 - batch 8/10, discriminator_loss=0.172, generator_loss=1.137
1/1 [=====] - 0s 19ms/step
epoch 2900 - batch 9/10, discriminator_loss=0.003, generator_loss=1.133
1/1 [=====] - 0s 24ms/step
epoch 2900 - batch 10/10, discriminator_loss=0.015, generator_loss=1.138
1/1 [=====] - 0s 23ms/step
epoch 2901 - batch 1/10, discriminator_loss=0.002, generator_loss=1.117
1/1 [=====] - 0s 22ms/step
epoch 2901 - batch 2/10, discriminator_loss=0.027, generator_loss=1.151
1/1 [=====] - 0s 25ms/step
epoch 2901 - batch 3/10, discriminator_loss=0.003, generator_loss=1.148
1/1 [=====] - 0s 31ms/step
epoch 2901 - batch 4/10, discriminator_loss=0.017, generator_loss=1.114
1/1 [=====] - 0s 19ms/step
epoch 2901 - batch 5/10, discriminator_loss=0.005, generator_loss=1.156
1/1 [=====] - 0s 16ms/step
epoch 2901 - batch 6/10, discriminator_loss=0.006, generator_loss=1.149
1/1 [=====] - 0s 16ms/step
epoch 2901 - batch 7/10, discriminator_loss=0.014, generator_loss=1.229
1/1 [=====] - 0s 16ms/step
epoch 2901 - batch 8/10, discriminator_loss=0.006, generator_loss=1.210
1/1 [=====] - 0s 16ms/step
epoch 2901 - batch 9/10, discriminator_loss=0.015, generator_loss=1.214
1/1 [=====] - 0s 23ms/step
epoch 2901 - batch 10/10, discriminator_loss=0.008, generator_loss=1.218
4/4 [=====] - 0s 52ms/step
Accuracy réelle : 97%, fausse : 100%
1/1 [=====] - 0s 20ms/step
epoch 2902 - batch 1/10, discriminator_loss=0.001, generator_loss=1.245
1/1 [=====] - 0s 28ms/step
epoch 2902 - batch 2/10, discriminator_loss=0.003, generator_loss=1.509
1/1 [=====] - 0s 16ms/step
epoch 2902 - batch 3/10, discriminator_loss=0.125, generator_loss=1.331
1/1 [=====] - 0s 23ms/step
epoch 2902 - batch 4/10, discriminator_loss=0.000, generator_loss=1.395
1/1 [=====] - 0s 23ms/step
epoch 2902 - batch 5/10, discriminator_loss=0.002, generator_loss=1.350
1/1 [=====] - 0s 18ms/step
epoch 2902 - batch 6/10, discriminator_loss=0.001, generator_loss=2.489
1/1 [=====] - 0s 19ms/step
epoch 2902 - batch 7/10, discriminator_loss=0.003, generator_loss=1.536

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1/1 [=====] - 0s 26ms/step
epoch 2902 - batch 8/10, discriminator_loss=0.016, generator_loss=1.663
1/1 [=====] - 0s 16ms/step
epoch 2902 - batch 9/10, discriminator_loss=0.007, generator_loss=1.584
1/1 [=====] - 0s 22ms/step
epoch 2902 - batch 10/10, discriminator_loss=0.007, generator_loss=1.531
1/1 [=====] - 0s 25ms/step
epoch 2903 - batch 1/10, discriminator_loss=0.002, generator_loss=1.718
1/1 [=====] - 0s 23ms/step
epoch 2903 - batch 2/10, discriminator_loss=0.388, generator_loss=1.547
1/1 [=====] - 0s 23ms/step
epoch 2903 - batch 3/10, discriminator_loss=0.005, generator_loss=1.614
1/1 [=====] - 0s 16ms/step
epoch 2903 - batch 4/10, discriminator_loss=0.005, generator_loss=1.500
1/1 [=====] - 0s 15ms/step
epoch 2903 - batch 5/10, discriminator_loss=0.003, generator_loss=1.552
1/1 [=====] - 0s 22ms/step
epoch 2903 - batch 6/10, discriminator_loss=0.002, generator_loss=1.511
1/1 [=====] - 0s 20ms/step
epoch 2903 - batch 7/10, discriminator_loss=0.004, generator_loss=1.482
1/1 [=====] - 0s 21ms/step
epoch 2903 - batch 8/10, discriminator_loss=0.003, generator_loss=1.499
1/1 [=====] - 0s 22ms/step
epoch 2903 - batch 9/10, discriminator_loss=0.002, generator_loss=1.481
1/1 [=====] - 0s 19ms/step
epoch 2903 - batch 10/10, discriminator_loss=0.003, generator_loss=1.473
1/1 [=====] - 0s 27ms/step
epoch 2904 - batch 1/10, discriminator_loss=0.003, generator_loss=1.514
1/1 [=====] - 0s 22ms/step
epoch 2904 - batch 2/10, discriminator_loss=0.009, generator_loss=1.407
1/1 [=====] - 0s 17ms/step
epoch 2904 - batch 3/10, discriminator_loss=0.001, generator_loss=1.642
1/1 [=====] - 0s 18ms/step
epoch 2904 - batch 4/10, discriminator_loss=0.020, generator_loss=1.384
1/1 [=====] - 0s 26ms/step
epoch 2904 - batch 5/10, discriminator_loss=0.007, generator_loss=1.559
1/1 [=====] - 0s 23ms/step
epoch 2904 - batch 6/10, discriminator_loss=0.003, generator_loss=1.519
1/1 [=====] - 0s 18ms/step
epoch 2904 - batch 7/10, discriminator_loss=0.017, generator_loss=1.235
1/1 [=====] - 0s 18ms/step
epoch 2904 - batch 8/10, discriminator_loss=0.281, generator_loss=1.503
1/1 [=====] - 0s 16ms/step
epoch 2904 - batch 9/10, discriminator_loss=0.415, generator_loss=1.331
1/1 [=====] - 0s 18ms/step
epoch 2904 - batch 10/10, discriminator_loss=0.005, generator_loss=1.241
1/1 [=====] - 0s 23ms/step
epoch 2905 - batch 1/10, discriminator_loss=0.004, generator_loss=0.978

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1/1 [=====] - 0s 19ms/step
epoch 2905 - batch 2/10, discriminator_loss=0.019, generator_loss=0.910
1/1 [=====] - 0s 17ms/step
epoch 2905 - batch 3/10, discriminator_loss=0.013, generator_loss=0.972
1/1 [=====] - 0s 17ms/step
epoch 2905 - batch 4/10, discriminator_loss=0.010, generator_loss=0.894
1/1 [=====] - 0s 23ms/step
epoch 2905 - batch 5/10, discriminator_loss=0.007, generator_loss=0.790
1/1 [=====] - 0s 21ms/step
epoch 2905 - batch 6/10, discriminator_loss=0.130, generator_loss=0.798
1/1 [=====] - 0s 24ms/step
epoch 2905 - batch 7/10, discriminator_loss=0.130, generator_loss=1.183
1/1 [=====] - 0s 26ms/step
epoch 2905 - batch 8/10, discriminator_loss=0.007, generator_loss=1.982
1/1 [=====] - 0s 20ms/step
epoch 2905 - batch 9/10, discriminator_loss=0.007, generator_loss=1.842
1/1 [=====] - 0s 18ms/step
epoch 2905 - batch 10/10, discriminator_loss=0.008, generator_loss=1.807
1/1 [=====] - 0s 22ms/step
epoch 2906 - batch 1/10, discriminator_loss=0.005, generator_loss=1.953
1/1 [=====] - 0s 22ms/step
epoch 2906 - batch 2/10, discriminator_loss=0.189, generator_loss=1.752
1/1 [=====] - 0s 31ms/step
epoch 2906 - batch 3/10, discriminator_loss=0.003, generator_loss=1.729
1/1 [=====] - 0s 24ms/step
epoch 2906 - batch 4/10, discriminator_loss=0.019, generator_loss=1.731
1/1 [=====] - 0s 26ms/step
epoch 2906 - batch 5/10, discriminator_loss=0.012, generator_loss=1.748
1/1 [=====] - 0s 24ms/step
epoch 2906 - batch 6/10, discriminator_loss=0.253, generator_loss=1.832
1/1 [=====] - 0s 24ms/step
epoch 2906 - batch 7/10, discriminator_loss=0.009, generator_loss=1.823
1/1 [=====] - 0s 18ms/step
epoch 2906 - batch 8/10, discriminator_loss=0.011, generator_loss=1.923
1/1 [=====] - 0s 28ms/step
epoch 2906 - batch 9/10, discriminator_loss=0.022, generator_loss=1.842
1/1 [=====] - 0s 18ms/step
epoch 2906 - batch 10/10, discriminator_loss=0.019, generator_loss=2.018
1/1 [=====] - 0s 23ms/step
epoch 2907 - batch 1/10, discriminator_loss=0.026, generator_loss=1.900
1/1 [=====] - 0s 21ms/step
epoch 2907 - batch 2/10, discriminator_loss=0.012, generator_loss=2.256
1/1 [=====] - 0s 25ms/step
epoch 2907 - batch 3/10, discriminator_loss=0.249, generator_loss=2.292
1/1 [=====] - 0s 39ms/step
epoch 2907 - batch 4/10, discriminator_loss=0.027, generator_loss=2.151
1/1 [=====] - 0s 18ms/step
epoch 2907 - batch 5/10, discriminator_loss=0.004, generator_loss=2.255

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1/1 [=====] - 0s 22ms/step
epoch 2907 - batch 6/10, discriminator_loss=0.011, generator_loss=2.264
1/1 [=====] - 0s 18ms/step
epoch 2907 - batch 7/10, discriminator_loss=0.014, generator_loss=2.384
1/1 [=====] - 0s 24ms/step
epoch 2907 - batch 8/10, discriminator_loss=0.025, generator_loss=2.560
1/1 [=====] - 0s 23ms/step
epoch 2907 - batch 9/10, discriminator_loss=0.251, generator_loss=2.398
1/1 [=====] - 0s 19ms/step
epoch 2907 - batch 10/10, discriminator_loss=0.014, generator_loss=2.646
1/1 [=====] - 0s 26ms/step
epoch 2908 - batch 1/10, discriminator_loss=0.013, generator_loss=2.416
1/1 [=====] - 0s 26ms/step
epoch 2908 - batch 2/10, discriminator_loss=0.014, generator_loss=2.845
1/1 [=====] - 0s 23ms/step
epoch 2908 - batch 3/10, discriminator_loss=0.011, generator_loss=2.384
1/1 [=====] - 0s 20ms/step
epoch 2908 - batch 4/10, discriminator_loss=0.013, generator_loss=2.391
1/1 [=====] - 0s 24ms/step
epoch 2908 - batch 5/10, discriminator_loss=0.015, generator_loss=2.910
1/1 [=====] - 0s 28ms/step
epoch 2908 - batch 6/10, discriminator_loss=0.008, generator_loss=2.739
1/1 [=====] - 0s 23ms/step
epoch 2908 - batch 7/10, discriminator_loss=0.014, generator_loss=2.805
1/1 [=====] - 0s 20ms/step
epoch 2908 - batch 8/10, discriminator_loss=0.005, generator_loss=3.033
1/1 [=====] - 0s 23ms/step
epoch 2908 - batch 9/10, discriminator_loss=0.005, generator_loss=2.814
1/1 [=====] - 0s 25ms/step
epoch 2908 - batch 10/10, discriminator_loss=0.003, generator_loss=3.068
1/1 [=====] - 0s 17ms/step
epoch 2909 - batch 1/10, discriminator_loss=0.006, generator_loss=3.489
1/1 [=====] - 0s 28ms/step
epoch 2909 - batch 2/10, discriminator_loss=0.406, generator_loss=3.248
1/1 [=====] - 0s 27ms/step
epoch 2909 - batch 3/10, discriminator_loss=0.005, generator_loss=3.398
1/1 [=====] - 0s 22ms/step
epoch 2909 - batch 4/10, discriminator_loss=0.008, generator_loss=3.134
1/1 [=====] - 0s 22ms/step
epoch 2909 - batch 5/10, discriminator_loss=0.007, generator_loss=3.656
1/1 [=====] - 0s 23ms/step
epoch 2909 - batch 6/10, discriminator_loss=0.010, generator_loss=3.440
1/1 [=====] - 0s 21ms/step
epoch 2909 - batch 7/10, discriminator_loss=0.008, generator_loss=3.580
1/1 [=====] - 0s 19ms/step
epoch 2909 - batch 8/10, discriminator_loss=0.006, generator_loss=3.254
1/1 [=====] - 0s 17ms/step
epoch 2909 - batch 9/10, discriminator_loss=0.009, generator_loss=3.671

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1/1 [=====] - 0s 21ms/step
epoch 2909 - batch 10/10, discriminator_loss=0.005, generator_loss=3.854
1/1 [=====] - 0s 24ms/step
epoch 2910 - batch 1/10, discriminator_loss=0.004, generator_loss=3.673
1/1 [=====] - 0s 28ms/step
epoch 2910 - batch 2/10, discriminator_loss=0.006, generator_loss=4.123
1/1 [=====] - 0s 19ms/step
epoch 2910 - batch 3/10, discriminator_loss=0.006, generator_loss=3.734
1/1 [=====] - 0s 27ms/step
epoch 2910 - batch 4/10, discriminator_loss=0.007, generator_loss=3.794
1/1 [=====] - 0s 27ms/step
epoch 2910 - batch 5/10, discriminator_loss=0.007, generator_loss=4.061
1/1 [=====] - 0s 26ms/step
epoch 2910 - batch 6/10, discriminator_loss=0.003, generator_loss=4.093
1/1 [=====] - 0s 23ms/step
epoch 2910 - batch 7/10, discriminator_loss=0.007, generator_loss=4.006
1/1 [=====] - 0s 21ms/step
epoch 2910 - batch 8/10, discriminator_loss=0.004, generator_loss=4.579
1/1 [=====] - 0s 25ms/step
epoch 2910 - batch 9/10, discriminator_loss=0.005, generator_loss=4.542
1/1 [=====] - 0s 19ms/step
epoch 2910 - batch 10/10, discriminator_loss=0.004, generator_loss=4.423
1/1 [=====] - 0s 18ms/step
epoch 2911 - batch 1/10, discriminator_loss=0.005, generator_loss=5.309
1/1 [=====] - 0s 17ms/step
epoch 2911 - batch 2/10, discriminator_loss=0.006, generator_loss=4.735
1/1 [=====] - 0s 16ms/step
epoch 2911 - batch 3/10, discriminator_loss=0.004, generator_loss=4.492
1/1 [=====] - 0s 21ms/step
epoch 2911 - batch 4/10, discriminator_loss=0.003, generator_loss=4.810
1/1 [=====] - 0s 22ms/step
epoch 2911 - batch 5/10, discriminator_loss=0.002, generator_loss=4.948
1/1 [=====] - 0s 18ms/step
epoch 2911 - batch 6/10, discriminator_loss=0.002, generator_loss=4.944
1/1 [=====] - 0s 20ms/step
epoch 2911 - batch 7/10, discriminator_loss=0.478, generator_loss=5.262
1/1 [=====] - 0s 23ms/step
epoch 2911 - batch 8/10, discriminator_loss=0.004, generator_loss=5.570
1/1 [=====] - 0s 17ms/step
epoch 2911 - batch 9/10, discriminator_loss=0.008, generator_loss=5.249
1/1 [=====] - 0s 17ms/step
epoch 2911 - batch 10/10, discriminator_loss=0.003, generator_loss=5.220
1/1 [=====] - 0s 20ms/step
epoch 2912 - batch 1/10, discriminator_loss=0.003, generator_loss=5.383
1/1 [=====] - 0s 22ms/step
epoch 2912 - batch 2/10, discriminator_loss=0.368, generator_loss=5.622
1/1 [=====] - 0s 16ms/step
epoch 2912 - batch 3/10, discriminator_loss=0.006, generator_loss=5.546

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1/1 [=====] - 0s 20ms/step
epoch 2912 - batch 4/10, discriminator_loss=0.002, generator_loss=5.246
1/1 [=====] - 0s 19ms/step
epoch 2912 - batch 5/10, discriminator_loss=0.008, generator_loss=5.366
1/1 [=====] - 0s 16ms/step
epoch 2912 - batch 6/10, discriminator_loss=0.006, generator_loss=5.487
1/1 [=====] - 0s 16ms/step
epoch 2912 - batch 7/10, discriminator_loss=0.007, generator_loss=5.600
1/1 [=====] - 0s 15ms/step
epoch 2912 - batch 8/10, discriminator_loss=0.008, generator_loss=5.613
1/1 [=====] - 0s 16ms/step
epoch 2912 - batch 9/10, discriminator_loss=0.006, generator_loss=5.793
1/1 [=====] - 0s 23ms/step
epoch 2912 - batch 10/10, discriminator_loss=0.004, generator_loss=5.681
1/1 [=====] - 0s 18ms/step
epoch 2913 - batch 1/10, discriminator_loss=0.016, generator_loss=5.735
1/1 [=====] - 0s 23ms/step
epoch 2913 - batch 2/10, discriminator_loss=0.009, generator_loss=5.928
1/1 [=====] - 0s 23ms/step
epoch 2913 - batch 3/10, discriminator_loss=0.006, generator_loss=5.871
1/1 [=====] - 0s 23ms/step
epoch 2913 - batch 4/10, discriminator_loss=0.116, generator_loss=5.897
1/1 [=====] - 0s 18ms/step
epoch 2913 - batch 5/10, discriminator_loss=0.005, generator_loss=6.162
1/1 [=====] - 0s 25ms/step
epoch 2913 - batch 6/10, discriminator_loss=0.007, generator_loss=6.068
1/1 [=====] - 0s 19ms/step
epoch 2913 - batch 7/10, discriminator_loss=0.006, generator_loss=6.306
1/1 [=====] - 0s 21ms/step
epoch 2913 - batch 8/10, discriminator_loss=0.005, generator_loss=6.350
1/1 [=====] - 0s 24ms/step
epoch 2913 - batch 9/10, discriminator_loss=0.006, generator_loss=6.567
1/1 [=====] - 0s 27ms/step
epoch 2913 - batch 10/10, discriminator_loss=0.004, generator_loss=6.407
1/1 [=====] - 0s 22ms/step
epoch 2914 - batch 1/10, discriminator_loss=0.005, generator_loss=6.430
1/1 [=====] - 0s 32ms/step
epoch 2914 - batch 2/10, discriminator_loss=0.005, generator_loss=6.466
1/1 [=====] - 0s 22ms/step
epoch 2914 - batch 3/10, discriminator_loss=0.009, generator_loss=6.786
1/1 [=====] - 0s 17ms/step
epoch 2914 - batch 4/10, discriminator_loss=0.004, generator_loss=7.066
1/1 [=====] - 0s 23ms/step
epoch 2914 - batch 5/10, discriminator_loss=0.005, generator_loss=6.740
1/1 [=====] - 0s 21ms/step
epoch 2914 - batch 6/10, discriminator_loss=0.004, generator_loss=6.818
1/1 [=====] - 0s 16ms/step
epoch 2914 - batch 7/10, discriminator_loss=0.005, generator_loss=6.766

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1/1 [=====] - 0s 18ms/step
epoch 2914 - batch 8/10, discriminator_loss=0.006, generator_loss=6.956
1/1 [=====] - 0s 18ms/step
epoch 2914 - batch 9/10, discriminator_loss=0.199, generator_loss=6.717
1/1 [=====] - 0s 17ms/step
epoch 2914 - batch 10/10, discriminator_loss=0.003, generator_loss=6.837
1/1 [=====] - 0s 17ms/step
epoch 2915 - batch 1/10, discriminator_loss=0.005, generator_loss=6.889
1/1 [=====] - 0s 21ms/step
epoch 2915 - batch 2/10, discriminator_loss=0.004, generator_loss=6.402
1/1 [=====] - 0s 22ms/step
epoch 2915 - batch 3/10, discriminator_loss=0.007, generator_loss=6.390
1/1 [=====] - 0s 25ms/step
epoch 2915 - batch 4/10, discriminator_loss=0.004, generator_loss=6.551
1/1 [=====] - 0s 20ms/step
epoch 2915 - batch 5/10, discriminator_loss=0.007, generator_loss=6.289
1/1 [=====] - 0s 23ms/step
epoch 2915 - batch 6/10, discriminator_loss=0.006, generator_loss=6.460
1/1 [=====] - 0s 24ms/step
epoch 2915 - batch 7/10, discriminator_loss=0.007, generator_loss=6.356
1/1 [=====] - 0s 16ms/step
epoch 2915 - batch 8/10, discriminator_loss=0.009, generator_loss=6.072
1/1 [=====] - 0s 19ms/step
epoch 2915 - batch 9/10, discriminator_loss=0.008, generator_loss=6.292
1/1 [=====] - 0s 16ms/step
epoch 2915 - batch 10/10, discriminator_loss=0.006, generator_loss=6.068
1/1 [=====] - 0s 24ms/step
epoch 2916 - batch 1/10, discriminator_loss=0.005, generator_loss=6.275
1/1 [=====] - 0s 23ms/step
epoch 2916 - batch 2/10, discriminator_loss=0.006, generator_loss=6.733
1/1 [=====] - 0s 27ms/step
epoch 2916 - batch 3/10, discriminator_loss=0.243, generator_loss=6.249
1/1 [=====] - 0s 24ms/step
epoch 2916 - batch 4/10, discriminator_loss=0.008, generator_loss=6.370
1/1 [=====] - 0s 26ms/step
epoch 2916 - batch 5/10, discriminator_loss=0.221, generator_loss=6.184
1/1 [=====] - 0s 17ms/step
epoch 2916 - batch 6/10, discriminator_loss=0.008, generator_loss=5.519
1/1 [=====] - 0s 18ms/step
epoch 2916 - batch 7/10, discriminator_loss=0.010, generator_loss=5.187
1/1 [=====] - 0s 20ms/step
epoch 2916 - batch 8/10, discriminator_loss=0.018, generator_loss=5.206
1/1 [=====] - 0s 16ms/step
epoch 2916 - batch 9/10, discriminator_loss=0.015, generator_loss=4.810
1/1 [=====] - 0s 20ms/step
epoch 2916 - batch 10/10, discriminator_loss=0.014, generator_loss=4.781
1/1 [=====] - 0s 18ms/step
epoch 2917 - batch 1/10, discriminator_loss=0.018, generator_loss=4.942

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1/1 [=====] - 0s 28ms/step
epoch 2917 - batch 2/10, discriminator_loss=0.020, generator_loss=4.904
1/1 [=====] - 0s 16ms/step
epoch 2917 - batch 3/10, discriminator_loss=0.010, generator_loss=4.886
1/1 [=====] - 0s 17ms/step
epoch 2917 - batch 4/10, discriminator_loss=0.192, generator_loss=5.057
1/1 [=====] - 0s 28ms/step
epoch 2917 - batch 5/10, discriminator_loss=0.014, generator_loss=4.860
1/1 [=====] - 0s 22ms/step
epoch 2917 - batch 6/10, discriminator_loss=0.023, generator_loss=4.812
1/1 [=====] - 0s 26ms/step
epoch 2917 - batch 7/10, discriminator_loss=0.015, generator_loss=4.581
1/1 [=====] - 0s 26ms/step
epoch 2917 - batch 8/10, discriminator_loss=0.020, generator_loss=4.623
1/1 [=====] - 0s 23ms/step
epoch 2917 - batch 9/10, discriminator_loss=0.015, generator_loss=5.437
1/1 [=====] - 0s 18ms/step
epoch 2917 - batch 10/10, discriminator_loss=0.014, generator_loss=4.743
1/1 [=====] - 0s 18ms/step
epoch 2918 - batch 1/10, discriminator_loss=0.026, generator_loss=4.748
1/1 [=====] - 0s 23ms/step
epoch 2918 - batch 2/10, discriminator_loss=0.012, generator_loss=4.953
1/1 [=====] - 0s 22ms/step
epoch 2918 - batch 3/10, discriminator_loss=0.022, generator_loss=4.961
1/1 [=====] - 0s 21ms/step
epoch 2918 - batch 4/10, discriminator_loss=0.008, generator_loss=5.233
1/1 [=====] - 0s 23ms/step
epoch 2918 - batch 5/10, discriminator_loss=0.591, generator_loss=4.773
1/1 [=====] - 0s 18ms/step
epoch 2918 - batch 6/10, discriminator_loss=0.009, generator_loss=4.872
1/1 [=====] - 0s 17ms/step
epoch 2918 - batch 7/10, discriminator_loss=0.032, generator_loss=4.672
1/1 [=====] - 0s 18ms/step
epoch 2918 - batch 8/10, discriminator_loss=0.029, generator_loss=4.543
1/1 [=====] - 0s 23ms/step
epoch 2918 - batch 9/10, discriminator_loss=0.026, generator_loss=4.132
1/1 [=====] - 0s 18ms/step
epoch 2918 - batch 10/10, discriminator_loss=0.023, generator_loss=4.166
1/1 [=====] - 0s 25ms/step
epoch 2919 - batch 1/10, discriminator_loss=0.023, generator_loss=4.028
1/1 [=====] - 0s 21ms/step
epoch 2919 - batch 2/10, discriminator_loss=0.028, generator_loss=4.125
1/1 [=====] - 0s 27ms/step
epoch 2919 - batch 3/10, discriminator_loss=0.035, generator_loss=4.418
1/1 [=====] - 0s 26ms/step
epoch 2919 - batch 4/10, discriminator_loss=0.015, generator_loss=4.465
1/1 [=====] - 0s 24ms/step
epoch 2919 - batch 5/10, discriminator_loss=0.014, generator_loss=4.953

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1/1 [=====] - 0s 18ms/step
epoch 2919 - batch 6/10, discriminator_loss=0.011, generator_loss=4.831
1/1 [=====] - 0s 17ms/step
epoch 2919 - batch 7/10, discriminator_loss=0.008, generator_loss=4.765
1/1 [=====] - 0s 19ms/step
epoch 2919 - batch 8/10, discriminator_loss=0.015, generator_loss=4.994
1/1 [=====] - 0s 25ms/step
epoch 2919 - batch 9/10, discriminator_loss=0.015, generator_loss=4.955
1/1 [=====] - 0s 26ms/step
epoch 2919 - batch 10/10, discriminator_loss=0.016, generator_loss=5.503
1/1 [=====] - 0s 19ms/step
epoch 2920 - batch 1/10, discriminator_loss=0.005, generator_loss=5.709
1/1 [=====] - 0s 22ms/step
epoch 2920 - batch 2/10, discriminator_loss=0.012, generator_loss=5.686
1/1 [=====] - 0s 25ms/step
epoch 2920 - batch 3/10, discriminator_loss=0.004, generator_loss=5.718
1/1 [=====] - 0s 23ms/step
epoch 2920 - batch 4/10, discriminator_loss=0.020, generator_loss=6.197
1/1 [=====] - 0s 17ms/step
epoch 2920 - batch 5/10, discriminator_loss=0.006, generator_loss=5.896
1/1 [=====] - 0s 22ms/step
epoch 2920 - batch 6/10, discriminator_loss=0.018, generator_loss=6.348
1/1 [=====] - 0s 18ms/step
epoch 2920 - batch 7/10, discriminator_loss=0.324, generator_loss=5.954
1/1 [=====] - 0s 22ms/step
epoch 2920 - batch 8/10, discriminator_loss=0.004, generator_loss=5.888
1/1 [=====] - 0s 23ms/step
epoch 2920 - batch 9/10, discriminator_loss=0.005, generator_loss=6.045
1/1 [=====] - 0s 20ms/step
epoch 2920 - batch 10/10, discriminator_loss=0.007, generator_loss=6.145
1/1 [=====] - 0s 17ms/step
epoch 2921 - batch 1/10, discriminator_loss=0.393, generator_loss=5.994
1/1 [=====] - 0s 23ms/step
epoch 2921 - batch 2/10, discriminator_loss=0.004, generator_loss=5.401
1/1 [=====] - 0s 21ms/step
epoch 2921 - batch 3/10, discriminator_loss=0.427, generator_loss=4.675
1/1 [=====] - 0s 18ms/step
epoch 2921 - batch 4/10, discriminator_loss=0.010, generator_loss=4.344
1/1 [=====] - 0s 17ms/step
epoch 2921 - batch 5/10, discriminator_loss=0.043, generator_loss=4.095
1/1 [=====] - 0s 26ms/step
epoch 2921 - batch 6/10, discriminator_loss=0.030, generator_loss=3.792
1/1 [=====] - 0s 16ms/step
epoch 2921 - batch 7/10, discriminator_loss=0.014, generator_loss=3.640
1/1 [=====] - 0s 17ms/step
epoch 2921 - batch 8/10, discriminator_loss=0.010, generator_loss=3.521
1/1 [=====] - 0s 22ms/step
epoch 2921 - batch 9/10, discriminator_loss=0.024, generator_loss=3.518

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1/1 [=====] - 0s 25ms/step
epoch 2921 - batch 10/10, discriminator_loss=0.024, generator_loss=3.570
4/4 [=====] - 0s 53ms/step
Accuracy réelle : 100%, fausse : 100%
1/1 [=====] - 0s 17ms/step
epoch 2922 - batch 1/10, discriminator_loss=0.164, generator_loss=3.289
1/1 [=====] - 0s 17ms/step
epoch 2922 - batch 2/10, discriminator_loss=0.215, generator_loss=3.173
1/1 [=====] - 0s 18ms/step
epoch 2922 - batch 3/10, discriminator_loss=0.018, generator_loss=2.916
1/1 [=====] - 0s 23ms/step
epoch 2922 - batch 4/10, discriminator_loss=0.027, generator_loss=2.883
1/1 [=====] - 0s 19ms/step
epoch 2922 - batch 5/10, discriminator_loss=0.052, generator_loss=2.722
1/1 [=====] - 0s 22ms/step
epoch 2922 - batch 6/10, discriminator_loss=0.020, generator_loss=3.208
1/1 [=====] - 0s 17ms/step
epoch 2922 - batch 7/10, discriminator_loss=0.215, generator_loss=2.858
1/1 [=====] - 0s 20ms/step
epoch 2922 - batch 8/10, discriminator_loss=0.035, generator_loss=2.905
1/1 [=====] - 0s 18ms/step
epoch 2922 - batch 9/10, discriminator_loss=0.012, generator_loss=2.711
1/1 [=====] - 0s 18ms/step
epoch 2922 - batch 10/10, discriminator_loss=0.008, generator_loss=3.005
1/1 [=====] - 0s 18ms/step
epoch 2923 - batch 1/10, discriminator_loss=0.014, generator_loss=3.017
1/1 [=====] - 0s 16ms/step
epoch 2923 - batch 2/10, discriminator_loss=0.010, generator_loss=3.769
1/1 [=====] - 0s 22ms/step
epoch 2923 - batch 3/10, discriminator_loss=0.014, generator_loss=2.871
1/1 [=====] - 0s 19ms/step
epoch 2923 - batch 4/10, discriminator_loss=0.203, generator_loss=2.783
1/1 [=====] - 0s 16ms/step
epoch 2923 - batch 5/10, discriminator_loss=0.010, generator_loss=2.810
1/1 [=====] - 0s 16ms/step
epoch 2923 - batch 6/10, discriminator_loss=0.005, generator_loss=3.159
1/1 [=====] - 0s 17ms/step
epoch 2923 - batch 7/10, discriminator_loss=0.314, generator_loss=2.873
1/1 [=====] - 0s 18ms/step
epoch 2923 - batch 8/10, discriminator_loss=0.020, generator_loss=3.002
1/1 [=====] - 0s 23ms/step
epoch 2923 - batch 9/10, discriminator_loss=0.010, generator_loss=3.002
1/1 [=====] - 0s 27ms/step
epoch 2923 - batch 10/10, discriminator_loss=0.033, generator_loss=2.619
1/1 [=====] - 0s 19ms/step
epoch 2924 - batch 1/10, discriminator_loss=0.014, generator_loss=2.845
1/1 [=====] - 0s 20ms/step
epoch 2924 - batch 2/10, discriminator_loss=0.012, generator_loss=2.635

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1/1 [=====] - 0s 22ms/step
epoch 2924 - batch 3/10, discriminator_loss=0.026, generator_loss=2.789
1/1 [=====] - 0s 16ms/step
epoch 2924 - batch 4/10, discriminator_loss=0.011, generator_loss=3.012
1/1 [=====] - 0s 20ms/step
epoch 2924 - batch 5/10, discriminator_loss=0.017, generator_loss=2.908
1/1 [=====] - 0s 18ms/step
epoch 2924 - batch 6/10, discriminator_loss=0.031, generator_loss=3.331
1/1 [=====] - 0s 17ms/step
epoch 2924 - batch 7/10, discriminator_loss=0.008, generator_loss=3.747
1/1 [=====] - 0s 19ms/step
epoch 2924 - batch 8/10, discriminator_loss=0.009, generator_loss=3.557
1/1 [=====] - 0s 24ms/step
epoch 2924 - batch 9/10, discriminator_loss=0.015, generator_loss=3.564
1/1 [=====] - 0s 21ms/step
epoch 2924 - batch 10/10, discriminator_loss=0.004, generator_loss=3.972
1/1 [=====] - 0s 19ms/step
epoch 2925 - batch 1/10, discriminator_loss=0.008, generator_loss=4.173
1/1 [=====] - 0s 16ms/step
epoch 2925 - batch 2/10, discriminator_loss=0.013, generator_loss=4.949
1/1 [=====] - 0s 15ms/step
epoch 2925 - batch 3/10, discriminator_loss=0.007, generator_loss=4.648
1/1 [=====] - 0s 17ms/step
epoch 2925 - batch 4/10, discriminator_loss=0.005, generator_loss=5.069
1/1 [=====] - 0s 17ms/step
epoch 2925 - batch 5/10, discriminator_loss=0.007, generator_loss=5.441
1/1 [=====] - 0s 16ms/step
epoch 2925 - batch 6/10, discriminator_loss=0.007, generator_loss=5.703
1/1 [=====] - 0s 20ms/step
epoch 2925 - batch 7/10, discriminator_loss=0.002, generator_loss=5.819
1/1 [=====] - 0s 22ms/step
epoch 2925 - batch 8/10, discriminator_loss=0.003, generator_loss=6.419
1/1 [=====] - 0s 22ms/step
epoch 2925 - batch 9/10, discriminator_loss=0.002, generator_loss=6.490
1/1 [=====] - 0s 21ms/step
epoch 2925 - batch 10/10, discriminator_loss=0.002, generator_loss=6.532
1/1 [=====] - 0s 19ms/step
epoch 2926 - batch 1/10, discriminator_loss=0.002, generator_loss=7.359
1/1 [=====] - 0s 16ms/step
epoch 2926 - batch 2/10, discriminator_loss=0.001, generator_loss=7.261
1/1 [=====] - 0s 18ms/step
epoch 2926 - batch 3/10, discriminator_loss=0.701, generator_loss=6.630
1/1 [=====] - 0s 33ms/step
epoch 2926 - batch 4/10, discriminator_loss=0.001, generator_loss=5.808
1/1 [=====] - 0s 22ms/step
epoch 2926 - batch 5/10, discriminator_loss=0.002, generator_loss=5.308
1/1 [=====] - 0s 19ms/step
epoch 2926 - batch 6/10, discriminator_loss=0.002, generator_loss=4.952

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1/1 [=====] - 0s 20ms/step
epoch 2926 - batch 7/10, discriminator_loss=0.003, generator_loss=4.674
1/1 [=====] - 0s 24ms/step
epoch 2926 - batch 8/10, discriminator_loss=0.005, generator_loss=4.602
1/1 [=====] - 0s 23ms/step
epoch 2926 - batch 9/10, discriminator_loss=0.002, generator_loss=4.174
1/1 [=====] - 0s 19ms/step
epoch 2926 - batch 10/10, discriminator_loss=0.007, generator_loss=4.016
1/1 [=====] - 0s 19ms/step
epoch 2927 - batch 1/10, discriminator_loss=0.012, generator_loss=3.681
1/1 [=====] - 0s 22ms/step
epoch 2927 - batch 2/10, discriminator_loss=0.006, generator_loss=3.661
1/1 [=====] - 0s 30ms/step
epoch 2927 - batch 3/10, discriminator_loss=0.011, generator_loss=3.549
1/1 [=====] - 0s 17ms/step
epoch 2927 - batch 4/10, discriminator_loss=0.007, generator_loss=3.806
1/1 [=====] - 0s 22ms/step
epoch 2927 - batch 5/10, discriminator_loss=0.005, generator_loss=3.574
1/1 [=====] - 0s 19ms/step
epoch 2927 - batch 6/10, discriminator_loss=0.192, generator_loss=3.583
1/1 [=====] - 0s 16ms/step
epoch 2927 - batch 7/10, discriminator_loss=0.003, generator_loss=3.500
1/1 [=====] - 0s 24ms/step
epoch 2927 - batch 8/10, discriminator_loss=0.389, generator_loss=3.166
1/1 [=====] - 0s 23ms/step
epoch 2927 - batch 9/10, discriminator_loss=0.011, generator_loss=3.028
1/1 [=====] - 0s 23ms/step
epoch 2927 - batch 10/10, discriminator_loss=0.016, generator_loss=2.681
1/1 [=====] - 0s 21ms/step
epoch 2928 - batch 1/10, discriminator_loss=0.013, generator_loss=2.629
1/1 [=====] - 0s 19ms/step
epoch 2928 - batch 2/10, discriminator_loss=0.012, generator_loss=2.615
1/1 [=====] - 0s 25ms/step
epoch 2928 - batch 3/10, discriminator_loss=0.012, generator_loss=2.408
1/1 [=====] - 0s 25ms/step
epoch 2928 - batch 4/10, discriminator_loss=0.011, generator_loss=2.426
1/1 [=====] - 0s 21ms/step
epoch 2928 - batch 5/10, discriminator_loss=0.011, generator_loss=2.249
1/1 [=====] - 0s 22ms/step
epoch 2928 - batch 6/10, discriminator_loss=0.019, generator_loss=2.305
1/1 [=====] - 0s 17ms/step
epoch 2928 - batch 7/10, discriminator_loss=0.020, generator_loss=2.584
1/1 [=====] - 0s 20ms/step
epoch 2928 - batch 8/10, discriminator_loss=0.130, generator_loss=2.434
1/1 [=====] - 0s 19ms/step
epoch 2928 - batch 9/10, discriminator_loss=0.034, generator_loss=2.612
1/1 [=====] - 0s 16ms/step
epoch 2928 - batch 10/10, discriminator_loss=0.012, generator_loss=2.629

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1/1 [=====] - 0s 17ms/step
epoch 2929 - batch 1/10, discriminator_loss=0.011, generator_loss=3.040
1/1 [=====] - 0s 32ms/step
epoch 2929 - batch 2/10, discriminator_loss=0.164, generator_loss=3.072
1/1 [=====] - 0s 22ms/step
epoch 2929 - batch 3/10, discriminator_loss=0.008, generator_loss=2.809
1/1 [=====] - 0s 24ms/step
epoch 2929 - batch 4/10, discriminator_loss=0.011, generator_loss=2.972
1/1 [=====] - 0s 21ms/step
epoch 2929 - batch 5/10, discriminator_loss=0.006, generator_loss=2.921
1/1 [=====] - 0s 19ms/step
epoch 2929 - batch 6/10, discriminator_loss=0.014, generator_loss=3.043
1/1 [=====] - 0s 16ms/step
epoch 2929 - batch 7/10, discriminator_loss=0.008, generator_loss=3.471
1/1 [=====] - 0s 21ms/step
epoch 2929 - batch 8/10, discriminator_loss=0.006, generator_loss=3.366
1/1 [=====] - 0s 18ms/step
epoch 2929 - batch 9/10, discriminator_loss=0.002, generator_loss=3.644
1/1 [=====] - 0s 17ms/step
epoch 2929 - batch 10/10, discriminator_loss=0.006, generator_loss=3.598
1/1 [=====] - 0s 17ms/step
epoch 2930 - batch 1/10, discriminator_loss=0.619, generator_loss=3.053
1/1 [=====] - 0s 19ms/step
epoch 2930 - batch 2/10, discriminator_loss=0.006, generator_loss=3.119
1/1 [=====] - 0s 17ms/step
epoch 2930 - batch 3/10, discriminator_loss=0.008, generator_loss=3.081
1/1 [=====] - 0s 18ms/step
epoch 2930 - batch 4/10, discriminator_loss=0.146, generator_loss=2.781
1/1 [=====] - 0s 21ms/step
epoch 2930 - batch 5/10, discriminator_loss=0.010, generator_loss=2.630
1/1 [=====] - 0s 27ms/step
epoch 2930 - batch 6/10, discriminator_loss=0.124, generator_loss=2.512
1/1 [=====] - 0s 19ms/step
epoch 2930 - batch 7/10, discriminator_loss=0.020, generator_loss=2.314
1/1 [=====] - 0s 18ms/step
epoch 2930 - batch 8/10, discriminator_loss=0.033, generator_loss=2.203
1/1 [=====] - 0s 18ms/step
epoch 2930 - batch 9/10, discriminator_loss=0.019, generator_loss=2.279
1/1 [=====] - 0s 20ms/step
epoch 2930 - batch 10/10, discriminator_loss=0.024, generator_loss=2.272
1/1 [=====] - 0s 25ms/step
epoch 2931 - batch 1/10, discriminator_loss=0.026, generator_loss=2.357
1/1 [=====] - 0s 19ms/step
epoch 2931 - batch 2/10, discriminator_loss=0.012, generator_loss=2.423
1/1 [=====] - 0s 33ms/step
epoch 2931 - batch 3/10, discriminator_loss=0.007, generator_loss=2.786
1/1 [=====] - 0s 21ms/step
epoch 2931 - batch 4/10, discriminator_loss=0.020, generator_loss=3.142

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1/1 [=====] - 0s 18ms/step
epoch 2931 - batch 5/10, discriminator_loss=0.280, generator_loss=2.917
1/1 [=====] - 0s 24ms/step
epoch 2931 - batch 6/10, discriminator_loss=0.005, generator_loss=3.035
1/1 [=====] - 0s 25ms/step
epoch 2931 - batch 7/10, discriminator_loss=0.015, generator_loss=3.110
1/1 [=====] - 0s 24ms/step
epoch 2931 - batch 8/10, discriminator_loss=0.028, generator_loss=3.419
1/1 [=====] - 0s 28ms/step
epoch 2931 - batch 9/10, discriminator_loss=0.010, generator_loss=3.475
1/1 [=====] - 0s 30ms/step
epoch 2931 - batch 10/10, discriminator_loss=0.012, generator_loss=3.683
1/1 [=====] - 0s 18ms/step
epoch 2932 - batch 1/10, discriminator_loss=0.004, generator_loss=4.040
1/1 [=====] - 0s 24ms/step
epoch 2932 - batch 2/10, discriminator_loss=0.005, generator_loss=4.403
1/1 [=====] - 0s 16ms/step
epoch 2932 - batch 3/10, discriminator_loss=0.010, generator_loss=3.969
1/1 [=====] - 0s 26ms/step
epoch 2932 - batch 4/10, discriminator_loss=0.015, generator_loss=4.692
1/1 [=====] - 0s 25ms/step
epoch 2932 - batch 5/10, discriminator_loss=0.715, generator_loss=3.671
1/1 [=====] - 0s 23ms/step
epoch 2932 - batch 6/10, discriminator_loss=0.011, generator_loss=3.309
1/1 [=====] - 0s 25ms/step
epoch 2932 - batch 7/10, discriminator_loss=0.328, generator_loss=2.901
1/1 [=====] - 0s 21ms/step
epoch 2932 - batch 8/10, discriminator_loss=0.050, generator_loss=2.208
1/1 [=====] - 0s 20ms/step
epoch 2932 - batch 9/10, discriminator_loss=0.020, generator_loss=2.060
1/1 [=====] - 0s 22ms/step
epoch 2932 - batch 10/10, discriminator_loss=0.045, generator_loss=1.667
1/1 [=====] - 0s 21ms/step
epoch 2933 - batch 1/10, discriminator_loss=0.030, generator_loss=1.715
1/1 [=====] - 0s 17ms/step
epoch 2933 - batch 2/10, discriminator_loss=0.016, generator_loss=1.858
1/1 [=====] - 0s 24ms/step
epoch 2933 - batch 3/10, discriminator_loss=0.036, generator_loss=1.851
1/1 [=====] - 0s 16ms/step
epoch 2933 - batch 4/10, discriminator_loss=0.025, generator_loss=1.812
1/1 [=====] - 0s 18ms/step
epoch 2933 - batch 5/10, discriminator_loss=0.033, generator_loss=1.802
1/1 [=====] - 0s 16ms/step
epoch 2933 - batch 6/10, discriminator_loss=0.243, generator_loss=2.138
1/1 [=====] - 0s 19ms/step
epoch 2933 - batch 7/10, discriminator_loss=0.010, generator_loss=2.036
1/1 [=====] - 0s 31ms/step
epoch 2933 - batch 8/10, discriminator_loss=0.019, generator_loss=2.166

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1/1 [=====] - 0s 23ms/step
epoch 2933 - batch 9/10, discriminator_loss=0.012, generator_loss=2.277
1/1 [=====] - 0s 24ms/step
epoch 2933 - batch 10/10, discriminator_loss=0.013, generator_loss=2.455
1/1 [=====] - 0s 20ms/step
epoch 2934 - batch 1/10, discriminator_loss=0.018, generator_loss=2.748
1/1 [=====] - 0s 21ms/step
epoch 2934 - batch 2/10, discriminator_loss=0.016, generator_loss=2.800
1/1 [=====] - 0s 19ms/step
epoch 2934 - batch 3/10, discriminator_loss=0.392, generator_loss=2.815
1/1 [=====] - 0s 20ms/step
epoch 2934 - batch 4/10, discriminator_loss=0.014, generator_loss=2.891
1/1 [=====] - 0s 21ms/step
epoch 2934 - batch 5/10, discriminator_loss=0.006, generator_loss=2.720
1/1 [=====] - 0s 28ms/step
epoch 2934 - batch 6/10, discriminator_loss=0.011, generator_loss=2.847
1/1 [=====] - 0s 21ms/step
epoch 2934 - batch 7/10, discriminator_loss=0.024, generator_loss=2.990
1/1 [=====] - 0s 17ms/step
epoch 2934 - batch 8/10, discriminator_loss=0.007, generator_loss=2.995
1/1 [=====] - 0s 22ms/step
epoch 2934 - batch 9/10, discriminator_loss=0.009, generator_loss=3.009
1/1 [=====] - 0s 19ms/step
epoch 2934 - batch 10/10, discriminator_loss=0.008, generator_loss=3.455
1/1 [=====] - 0s 24ms/step
epoch 2935 - batch 1/10, discriminator_loss=0.006, generator_loss=3.414
1/1 [=====] - 0s 25ms/step
epoch 2935 - batch 2/10, discriminator_loss=0.005, generator_loss=3.739
1/1 [=====] - 0s 16ms/step
epoch 2935 - batch 3/10, discriminator_loss=0.015, generator_loss=4.022
1/1 [=====] - 0s 17ms/step
epoch 2935 - batch 4/10, discriminator_loss=0.016, generator_loss=4.117
1/1 [=====] - 0s 18ms/step
epoch 2935 - batch 5/10, discriminator_loss=0.358, generator_loss=3.817
1/1 [=====] - 0s 22ms/step
epoch 2935 - batch 6/10, discriminator_loss=0.004, generator_loss=3.746
1/1 [=====] - 0s 22ms/step
epoch 2935 - batch 7/10, discriminator_loss=0.003, generator_loss=3.862
1/1 [=====] - 0s 18ms/step
epoch 2935 - batch 8/10, discriminator_loss=0.012, generator_loss=3.442
1/1 [=====] - 0s 16ms/step
epoch 2935 - batch 9/10, discriminator_loss=0.016, generator_loss=3.594
1/1 [=====] - 0s 17ms/step
epoch 2935 - batch 10/10, discriminator_loss=0.003, generator_loss=3.755
1/1 [=====] - 0s 22ms/step
epoch 2936 - batch 1/10, discriminator_loss=0.006, generator_loss=3.667
1/1 [=====] - 0s 16ms/step
epoch 2936 - batch 2/10, discriminator_loss=0.004, generator_loss=3.646

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1/1 [=====] - 0s 20ms/step
epoch 2936 - batch 3/10, discriminator_loss=0.003, generator_loss=3.784
1/1 [=====] - 0s 17ms/step
epoch 2936 - batch 4/10, discriminator_loss=0.004, generator_loss=3.763
1/1 [=====] - 0s 20ms/step
epoch 2936 - batch 5/10, discriminator_loss=0.008, generator_loss=4.001
1/1 [=====] - 0s 21ms/step
epoch 2936 - batch 6/10, discriminator_loss=0.004, generator_loss=3.948
1/1 [=====] - 0s 23ms/step
epoch 2936 - batch 7/10, discriminator_loss=0.404, generator_loss=3.666
1/1 [=====] - 0s 27ms/step
epoch 2936 - batch 8/10, discriminator_loss=0.003, generator_loss=3.521
1/1 [=====] - 0s 28ms/step
epoch 2936 - batch 9/10, discriminator_loss=0.009, generator_loss=3.451
1/1 [=====] - 0s 28ms/step
epoch 2936 - batch 10/10, discriminator_loss=0.006, generator_loss=3.342
1/1 [=====] - 0s 28ms/step
epoch 2937 - batch 1/10, discriminator_loss=0.238, generator_loss=3.032
1/1 [=====] - 0s 28ms/step
epoch 2937 - batch 2/10, discriminator_loss=0.010, generator_loss=2.700
1/1 [=====] - 0s 30ms/step
epoch 2937 - batch 3/10, discriminator_loss=0.007, generator_loss=2.572
1/1 [=====] - 0s 37ms/step
epoch 2937 - batch 4/10, discriminator_loss=0.021, generator_loss=2.270
1/1 [=====] - 0s 32ms/step
epoch 2937 - batch 5/10, discriminator_loss=0.019, generator_loss=2.480
1/1 [=====] - 0s 23ms/step
epoch 2937 - batch 6/10, discriminator_loss=0.200, generator_loss=2.122
1/1 [=====] - 0s 29ms/step
epoch 2937 - batch 7/10, discriminator_loss=0.032, generator_loss=2.000
1/1 [=====] - 0s 25ms/step
epoch 2937 - batch 8/10, discriminator_loss=0.036, generator_loss=1.998
1/1 [=====] - 0s 31ms/step
epoch 2937 - batch 9/10, discriminator_loss=0.067, generator_loss=2.049
1/1 [=====] - 0s 27ms/step
epoch 2937 - batch 10/10, discriminator_loss=0.017, generator_loss=2.156
1/1 [=====] - 0s 28ms/step
epoch 2938 - batch 1/10, discriminator_loss=0.082, generator_loss=2.454
1/1 [=====] - 0s 29ms/step
epoch 2938 - batch 2/10, discriminator_loss=0.017, generator_loss=2.832
1/1 [=====] - 0s 28ms/step
epoch 2938 - batch 3/10, discriminator_loss=0.034, generator_loss=3.090
1/1 [=====] - 0s 27ms/step
epoch 2938 - batch 4/10, discriminator_loss=0.147, generator_loss=3.468
1/1 [=====] - 0s 32ms/step
epoch 2938 - batch 5/10, discriminator_loss=0.025, generator_loss=3.543
1/1 [=====] - 0s 30ms/step
epoch 2938 - batch 6/10, discriminator_loss=0.018, generator_loss=4.187

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1/1 [=====] - 0s 27ms/step
epoch 2938 - batch 7/10, discriminator_loss=0.025, generator_loss=4.490
1/1 [=====] - 0s 18ms/step
epoch 2938 - batch 8/10, discriminator_loss=0.008, generator_loss=4.650
1/1 [=====] - 0s 22ms/step
epoch 2938 - batch 9/10, discriminator_loss=0.012, generator_loss=4.723
1/1 [=====] - 0s 22ms/step
epoch 2938 - batch 10/10, discriminator_loss=0.019, generator_loss=5.395
1/1 [=====] - 0s 16ms/step
epoch 2939 - batch 1/10, discriminator_loss=0.004, generator_loss=5.550
1/1 [=====] - 0s 16ms/step
epoch 2939 - batch 2/10, discriminator_loss=0.008, generator_loss=6.413
1/1 [=====] - 0s 21ms/step
epoch 2939 - batch 3/10, discriminator_loss=0.178, generator_loss=6.196
1/1 [=====] - 0s 19ms/step
epoch 2939 - batch 4/10, discriminator_loss=0.006, generator_loss=6.556
1/1 [=====] - 0s 16ms/step
epoch 2939 - batch 5/10, discriminator_loss=0.001, generator_loss=6.590
1/1 [=====] - 0s 23ms/step
epoch 2939 - batch 6/10, discriminator_loss=0.386, generator_loss=6.211
1/1 [=====] - 0s 19ms/step
epoch 2939 - batch 7/10, discriminator_loss=0.002, generator_loss=6.316
1/1 [=====] - 0s 19ms/step
epoch 2939 - batch 8/10, discriminator_loss=0.291, generator_loss=5.052
1/1 [=====] - 0s 22ms/step
epoch 2939 - batch 9/10, discriminator_loss=0.011, generator_loss=5.052
1/1 [=====] - 0s 22ms/step
epoch 2939 - batch 10/10, discriminator_loss=0.008, generator_loss=4.765
1/1 [=====] - 0s 21ms/step
epoch 2940 - batch 1/10, discriminator_loss=0.016, generator_loss=4.287
1/1 [=====] - 0s 26ms/step
epoch 2940 - batch 2/10, discriminator_loss=0.007, generator_loss=3.861
1/1 [=====] - 0s 20ms/step
epoch 2940 - batch 3/10, discriminator_loss=0.005, generator_loss=3.525
1/1 [=====] - 0s 20ms/step
epoch 2940 - batch 4/10, discriminator_loss=0.059, generator_loss=3.868
1/1 [=====] - 0s 18ms/step
epoch 2940 - batch 5/10, discriminator_loss=0.024, generator_loss=3.808
1/1 [=====] - 0s 18ms/step
epoch 2940 - batch 6/10, discriminator_loss=0.017, generator_loss=3.757
1/1 [=====] - 0s 16ms/step
epoch 2940 - batch 7/10, discriminator_loss=0.013, generator_loss=4.249
1/1 [=====] - 0s 25ms/step
epoch 2940 - batch 8/10, discriminator_loss=0.022, generator_loss=4.234
1/1 [=====] - 0s 18ms/step
epoch 2940 - batch 9/10, discriminator_loss=0.021, generator_loss=4.472
1/1 [=====] - 0s 22ms/step
epoch 2940 - batch 10/10, discriminator_loss=0.006, generator_loss=4.743

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1/1 [=====] - 0s 21ms/step
epoch 2941 - batch 1/10, discriminator_loss=0.012, generator_loss=5.301
1/1 [=====] - 0s 36ms/step
epoch 2941 - batch 2/10, discriminator_loss=0.009, generator_loss=5.546
1/1 [=====] - 0s 25ms/step
epoch 2941 - batch 3/10, discriminator_loss=0.006, generator_loss=5.842
1/1 [=====] - 0s 16ms/step
epoch 2941 - batch 4/10, discriminator_loss=0.008, generator_loss=5.615
1/1 [=====] - 0s 19ms/step
epoch 2941 - batch 5/10, discriminator_loss=0.005, generator_loss=5.956
1/1 [=====] - 0s 20ms/step
epoch 2941 - batch 6/10, discriminator_loss=0.005, generator_loss=6.232
1/1 [=====] - 0s 21ms/step
epoch 2941 - batch 7/10, discriminator_loss=0.007, generator_loss=6.514
1/1 [=====] - 0s 16ms/step
epoch 2941 - batch 8/10, discriminator_loss=0.005, generator_loss=6.626
1/1 [=====] - 0s 25ms/step
epoch 2941 - batch 9/10, discriminator_loss=0.003, generator_loss=6.903
1/1 [=====] - 0s 17ms/step
epoch 2941 - batch 10/10, discriminator_loss=0.002, generator_loss=7.231
4/4 [=====] - 0s 53ms/step
Accuracy réelle : 96%, fausse : 100%
1/1 [=====] - 0s 16ms/step
epoch 2942 - batch 1/10, discriminator_loss=0.002, generator_loss=6.979
1/1 [=====] - 0s 17ms/step
epoch 2942 - batch 2/10, discriminator_loss=0.001, generator_loss=7.442
1/1 [=====] - 0s 22ms/step
epoch 2942 - batch 3/10, discriminator_loss=0.002, generator_loss=7.821
1/1 [=====] - 0s 23ms/step
epoch 2942 - batch 4/10, discriminator_loss=0.002, generator_loss=7.596
1/1 [=====] - 0s 18ms/step
epoch 2942 - batch 5/10, discriminator_loss=0.001, generator_loss=7.708
1/1 [=====] - 0s 16ms/step
epoch 2942 - batch 6/10, discriminator_loss=0.001, generator_loss=7.451
1/1 [=====] - 0s 16ms/step
epoch 2942 - batch 7/10, discriminator_loss=0.001, generator_loss=8.102
1/1 [=====] - 0s 17ms/step
epoch 2942 - batch 8/10, discriminator_loss=0.002, generator_loss=7.897
1/1 [=====] - 0s 17ms/step
epoch 2942 - batch 9/10, discriminator_loss=0.443, generator_loss=7.472
1/1 [=====] - 0s 28ms/step
epoch 2942 - batch 10/10, discriminator_loss=0.343, generator_loss=6.330
1/1 [=====] - 0s 18ms/step
epoch 2943 - batch 1/10, discriminator_loss=0.004, generator_loss=5.550
1/1 [=====] - 0s 18ms/step
epoch 2943 - batch 2/10, discriminator_loss=0.003, generator_loss=5.498
1/1 [=====] - 0s 21ms/step
epoch 2943 - batch 3/10, discriminator_loss=0.003, generator_loss=4.600

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1/1 [=====] - 0s 17ms/step
epoch 2943 - batch 4/10, discriminator_loss=0.004, generator_loss=4.278
1/1 [=====] - 0s 19ms/step
epoch 2943 - batch 5/10, discriminator_loss=0.021, generator_loss=3.633
1/1 [=====] - 0s 17ms/step
epoch 2943 - batch 6/10, discriminator_loss=0.009, generator_loss=3.954
1/1 [=====] - 0s 21ms/step
epoch 2943 - batch 7/10, discriminator_loss=0.012, generator_loss=3.308
1/1 [=====] - 0s 23ms/step
epoch 2943 - batch 8/10, discriminator_loss=0.012, generator_loss=3.498
1/1 [=====] - 0s 15ms/step
epoch 2943 - batch 9/10, discriminator_loss=0.037, generator_loss=3.268
1/1 [=====] - 0s 16ms/step
epoch 2943 - batch 10/10, discriminator_loss=0.026, generator_loss=3.066
1/1 [=====] - 0s 17ms/step
epoch 2944 - batch 1/10, discriminator_loss=0.014, generator_loss=2.756
1/1 [=====] - 0s 30ms/step
epoch 2944 - batch 2/10, discriminator_loss=0.020, generator_loss=3.391
1/1 [=====] - 0s 17ms/step
epoch 2944 - batch 3/10, discriminator_loss=0.012, generator_loss=3.088
1/1 [=====] - 0s 24ms/step
epoch 2944 - batch 4/10, discriminator_loss=0.206, generator_loss=3.266
1/1 [=====] - 0s 31ms/step
epoch 2944 - batch 5/10, discriminator_loss=0.025, generator_loss=3.284
1/1 [=====] - 0s 30ms/step
epoch 2944 - batch 6/10, discriminator_loss=0.011, generator_loss=3.128
1/1 [=====] - 0s 30ms/step
epoch 2944 - batch 7/10, discriminator_loss=0.008, generator_loss=3.225
1/1 [=====] - 0s 26ms/step
epoch 2944 - batch 8/10, discriminator_loss=0.013, generator_loss=3.287
1/1 [=====] - 0s 34ms/step
epoch 2944 - batch 9/10, discriminator_loss=0.015, generator_loss=3.301
1/1 [=====] - 0s 28ms/step
epoch 2944 - batch 10/10, discriminator_loss=0.025, generator_loss=3.228
1/1 [=====] - 0s 45ms/step
epoch 2945 - batch 1/10, discriminator_loss=0.410, generator_loss=3.770
1/1 [=====] - 0s 58ms/step
epoch 2945 - batch 2/10, discriminator_loss=0.004, generator_loss=3.511
1/1 [=====] - 0s 28ms/step
epoch 2945 - batch 3/10, discriminator_loss=0.015, generator_loss=3.805
1/1 [=====] - 0s 34ms/step
epoch 2945 - batch 4/10, discriminator_loss=0.007, generator_loss=3.414
1/1 [=====] - 0s 37ms/step
epoch 2945 - batch 5/10, discriminator_loss=0.012, generator_loss=4.050
1/1 [=====] - 0s 48ms/step
epoch 2945 - batch 6/10, discriminator_loss=0.014, generator_loss=3.869
1/1 [=====] - 0s 51ms/step
epoch 2945 - batch 7/10, discriminator_loss=0.004, generator_loss=4.432

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1/1 [=====] - 0s 30ms/step
epoch 2945 - batch 8/10, discriminator_loss=0.446, generator_loss=4.204
1/1 [=====] - 0s 49ms/step
epoch 2945 - batch 9/10, discriminator_loss=0.009, generator_loss=3.980
1/1 [=====] - 0s 47ms/step
epoch 2945 - batch 10/10, discriminator_loss=0.038, generator_loss=4.083
1/1 [=====] - 0s 54ms/step
epoch 2946 - batch 1/10, discriminator_loss=0.007, generator_loss=3.939
1/1 [=====] - 0s 26ms/step
epoch 2946 - batch 2/10, discriminator_loss=0.018, generator_loss=4.054
1/1 [=====] - 0s 36ms/step
epoch 2946 - batch 3/10, discriminator_loss=0.022, generator_loss=4.430
1/1 [=====] - 0s 37ms/step
epoch 2946 - batch 4/10, discriminator_loss=0.003, generator_loss=4.353
1/1 [=====] - 0s 33ms/step
epoch 2946 - batch 5/10, discriminator_loss=0.011, generator_loss=4.759
1/1 [=====] - 0s 25ms/step
epoch 2946 - batch 6/10, discriminator_loss=0.007, generator_loss=4.876
1/1 [=====] - 0s 22ms/step
epoch 2946 - batch 7/10, discriminator_loss=0.049, generator_loss=5.245
1/1 [=====] - 0s 20ms/step
epoch 2946 - batch 8/10, discriminator_loss=0.010, generator_loss=5.112
1/1 [=====] - 0s 19ms/step
epoch 2946 - batch 9/10, discriminator_loss=0.010, generator_loss=5.386
1/1 [=====] - 0s 17ms/step
epoch 2946 - batch 10/10, discriminator_loss=0.290, generator_loss=5.340
1/1 [=====] - 0s 18ms/step
epoch 2947 - batch 1/10, discriminator_loss=0.014, generator_loss=5.646
1/1 [=====] - 0s 22ms/step
epoch 2947 - batch 2/10, discriminator_loss=0.003, generator_loss=5.264
1/1 [=====] - 0s 23ms/step
epoch 2947 - batch 3/10, discriminator_loss=0.004, generator_loss=5.553
1/1 [=====] - 0s 16ms/step
epoch 2947 - batch 4/10, discriminator_loss=0.003, generator_loss=5.984
1/1 [=====] - 0s 19ms/step
epoch 2947 - batch 5/10, discriminator_loss=0.012, generator_loss=5.782
1/1 [=====] - 0s 19ms/step
epoch 2947 - batch 6/10, discriminator_loss=0.003, generator_loss=5.398
1/1 [=====] - 0s 15ms/step
epoch 2947 - batch 7/10, discriminator_loss=0.004, generator_loss=5.607
1/1 [=====] - 0s 23ms/step
epoch 2947 - batch 8/10, discriminator_loss=0.004, generator_loss=5.725
1/1 [=====] - 0s 20ms/step
epoch 2947 - batch 9/10, discriminator_loss=0.006, generator_loss=5.913
1/1 [=====] - 0s 29ms/step
epoch 2947 - batch 10/10, discriminator_loss=0.005, generator_loss=6.048
1/1 [=====] - 0s 26ms/step
epoch 2948 - batch 1/10, discriminator_loss=0.002, generator_loss=6.139

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1/1 [=====] - 0s 17ms/step
epoch 2948 - batch 2/10, discriminator_loss=0.499, generator_loss=5.618
1/1 [=====] - 0s 17ms/step
epoch 2948 - batch 3/10, discriminator_loss=0.005, generator_loss=5.892
1/1 [=====] - 0s 24ms/step
epoch 2948 - batch 4/10, discriminator_loss=0.237, generator_loss=5.144
1/1 [=====] - 0s 22ms/step
epoch 2948 - batch 5/10, discriminator_loss=0.007, generator_loss=5.072
1/1 [=====] - 0s 21ms/step
epoch 2948 - batch 6/10, discriminator_loss=0.004, generator_loss=4.295
1/1 [=====] - 0s 17ms/step
epoch 2948 - batch 7/10, discriminator_loss=0.011, generator_loss=4.182
1/1 [=====] - 0s 17ms/step
epoch 2948 - batch 8/10, discriminator_loss=0.017, generator_loss=3.866
1/1 [=====] - 0s 19ms/step
epoch 2948 - batch 9/10, discriminator_loss=0.019, generator_loss=3.785
1/1 [=====] - 0s 19ms/step
epoch 2948 - batch 10/10, discriminator_loss=0.014, generator_loss=3.703
1/1 [=====] - 0s 23ms/step
epoch 2949 - batch 1/10, discriminator_loss=0.013, generator_loss=3.894
1/1 [=====] - 0s 20ms/step
epoch 2949 - batch 2/10, discriminator_loss=0.173, generator_loss=3.475
1/1 [=====] - 0s 18ms/step
epoch 2949 - batch 3/10, discriminator_loss=0.028, generator_loss=3.611
1/1 [=====] - 0s 22ms/step
epoch 2949 - batch 4/10, discriminator_loss=0.021, generator_loss=4.183
1/1 [=====] - 0s 23ms/step
epoch 2949 - batch 5/10, discriminator_loss=0.352, generator_loss=3.806
1/1 [=====] - 0s 18ms/step
epoch 2949 - batch 6/10, discriminator_loss=0.012, generator_loss=3.723
1/1 [=====] - 0s 17ms/step
epoch 2949 - batch 7/10, discriminator_loss=0.016, generator_loss=3.271
1/1 [=====] - 0s 19ms/step
epoch 2949 - batch 8/10, discriminator_loss=0.021, generator_loss=3.386
1/1 [=====] - 0s 17ms/step
epoch 2949 - batch 9/10, discriminator_loss=0.036, generator_loss=3.312
1/1 [=====] - 0s 21ms/step
epoch 2949 - batch 10/10, discriminator_loss=0.017, generator_loss=3.559
1/1 [=====] - 0s 17ms/step
epoch 2950 - batch 1/10, discriminator_loss=0.030, generator_loss=3.529
1/1 [=====] - 0s 16ms/step
epoch 2950 - batch 2/10, discriminator_loss=0.022, generator_loss=4.150
1/1 [=====] - 0s 19ms/step
epoch 2950 - batch 3/10, discriminator_loss=0.009, generator_loss=4.285
1/1 [=====] - 0s 20ms/step
epoch 2950 - batch 4/10, discriminator_loss=0.035, generator_loss=4.471
1/1 [=====] - 0s 18ms/step
epoch 2950 - batch 5/10, discriminator_loss=0.051, generator_loss=5.087

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1/1 [=====] - 0s 22ms/step
epoch 2950 - batch 6/10, discriminator_loss=0.008, generator_loss=5.378
1/1 [=====] - 0s 19ms/step
epoch 2950 - batch 7/10, discriminator_loss=0.014, generator_loss=5.585
1/1 [=====] - 0s 24ms/step
epoch 2950 - batch 8/10, discriminator_loss=0.016, generator_loss=5.947
1/1 [=====] - 0s 16ms/step
epoch 2950 - batch 9/10, discriminator_loss=0.008, generator_loss=6.086
1/1 [=====] - 0s 21ms/step
epoch 2950 - batch 10/10, discriminator_loss=0.005, generator_loss=6.895
1/1 [=====] - 0s 18ms/step
epoch 2951 - batch 1/10, discriminator_loss=0.002, generator_loss=8.504
1/1 [=====] - 0s 17ms/step
epoch 2951 - batch 2/10, discriminator_loss=0.003, generator_loss=8.059
1/1 [=====] - 0s 19ms/step
epoch 2951 - batch 3/10, discriminator_loss=0.002, generator_loss=8.248
1/1 [=====] - 0s 18ms/step
epoch 2951 - batch 4/10, discriminator_loss=0.002, generator_loss=8.215
1/1 [=====] - 0s 16ms/step
epoch 2951 - batch 5/10, discriminator_loss=0.001, generator_loss=8.463
1/1 [=====] - 0s 23ms/step
epoch 2951 - batch 6/10, discriminator_loss=0.002, generator_loss=8.430
1/1 [=====] - 0s 22ms/step
epoch 2951 - batch 7/10, discriminator_loss=0.001, generator_loss=8.796
1/1 [=====] - 0s 16ms/step
epoch 2951 - batch 8/10, discriminator_loss=0.001, generator_loss=8.858
1/1 [=====] - 0s 17ms/step
epoch 2951 - batch 9/10, discriminator_loss=0.001, generator_loss=9.316
1/1 [=====] - 0s 22ms/step
epoch 2951 - batch 10/10, discriminator_loss=0.003, generator_loss=9.520
1/1 [=====] - 0s 21ms/step
epoch 2952 - batch 1/10, discriminator_loss=0.003, generator_loss=9.396
1/1 [=====] - 0s 18ms/step
epoch 2952 - batch 2/10, discriminator_loss=0.001, generator_loss=9.429
1/1 [=====] - 0s 26ms/step
epoch 2952 - batch 3/10, discriminator_loss=0.001, generator_loss=9.587
1/1 [=====] - 0s 27ms/step
epoch 2952 - batch 4/10, discriminator_loss=0.000, generator_loss=9.228
1/1 [=====] - 0s 19ms/step
epoch 2952 - batch 5/10, discriminator_loss=0.001, generator_loss=9.751
1/1 [=====] - 0s 23ms/step
epoch 2952 - batch 6/10, discriminator_loss=0.001, generator_loss=9.875
1/1 [=====] - 0s 23ms/step
epoch 2952 - batch 7/10, discriminator_loss=0.000, generator_loss=9.813
1/1 [=====] - 0s 22ms/step
epoch 2952 - batch 8/10, discriminator_loss=0.683, generator_loss=9.119
1/1 [=====] - 0s 18ms/step
epoch 2952 - batch 9/10, discriminator_loss=0.000, generator_loss=8.349

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1/1 [=====] - 0s 18ms/step
epoch 2952 - batch 10/10, discriminator_loss=0.001, generator_loss=7.717
1/1 [=====] - 0s 18ms/step
epoch 2953 - batch 1/10, discriminator_loss=0.002, generator_loss=7.119
1/1 [=====] - 0s 20ms/step
epoch 2953 - batch 2/10, discriminator_loss=0.001, generator_loss=6.888
1/1 [=====] - 0s 16ms/step
epoch 2953 - batch 3/10, discriminator_loss=0.009, generator_loss=6.678
1/1 [=====] - 0s 17ms/step
epoch 2953 - batch 4/10, discriminator_loss=0.002, generator_loss=6.535
1/1 [=====] - 0s 23ms/step
epoch 2953 - batch 5/10, discriminator_loss=0.001, generator_loss=6.155
1/1 [=====] - 0s 17ms/step
epoch 2953 - batch 6/10, discriminator_loss=0.003, generator_loss=6.060
1/1 [=====] - 0s 16ms/step
epoch 2953 - batch 7/10, discriminator_loss=0.003, generator_loss=5.748
1/1 [=====] - 0s 17ms/step
epoch 2953 - batch 8/10, discriminator_loss=0.008, generator_loss=5.804
1/1 [=====] - 0s 18ms/step
epoch 2953 - batch 9/10, discriminator_loss=0.004, generator_loss=6.035
1/1 [=====] - 0s 17ms/step
epoch 2953 - batch 10/10, discriminator_loss=0.008, generator_loss=5.915
1/1 [=====] - 0s 17ms/step
epoch 2954 - batch 1/10, discriminator_loss=0.002, generator_loss=5.512
1/1 [=====] - 0s 18ms/step
epoch 2954 - batch 2/10, discriminator_loss=0.003, generator_loss=5.427
1/1 [=====] - 0s 17ms/step
epoch 2954 - batch 3/10, discriminator_loss=0.006, generator_loss=5.711
1/1 [=====] - 0s 19ms/step
epoch 2954 - batch 4/10, discriminator_loss=0.005, generator_loss=5.320
1/1 [=====] - 0s 22ms/step
epoch 2954 - batch 5/10, discriminator_loss=0.016, generator_loss=5.625
1/1 [=====] - 0s 23ms/step
epoch 2954 - batch 6/10, discriminator_loss=0.384, generator_loss=5.054
1/1 [=====] - 0s 25ms/step
epoch 2954 - batch 7/10, discriminator_loss=0.006, generator_loss=4.898
1/1 [=====] - 0s 19ms/step
epoch 2954 - batch 8/10, discriminator_loss=0.002, generator_loss=4.912
1/1 [=====] - 0s 23ms/step
epoch 2954 - batch 9/10, discriminator_loss=0.018, generator_loss=4.826
1/1 [=====] - 0s 18ms/step
epoch 2954 - batch 10/10, discriminator_loss=0.002, generator_loss=4.384
1/1 [=====] - 0s 19ms/step
epoch 2955 - batch 1/10, discriminator_loss=0.002, generator_loss=4.371
1/1 [=====] - 0s 16ms/step
epoch 2955 - batch 2/10, discriminator_loss=0.007, generator_loss=4.236
1/1 [=====] - 0s 21ms/step
epoch 2955 - batch 3/10, discriminator_loss=0.003, generator_loss=4.170

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1/1 [=====] - 0s 21ms/step
epoch 2955 - batch 4/10, discriminator_loss=0.006, generator_loss=3.850
1/1 [=====] - 0s 17ms/step
epoch 2955 - batch 5/10, discriminator_loss=0.015, generator_loss=4.042
1/1 [=====] - 0s 23ms/step
epoch 2955 - batch 6/10, discriminator_loss=0.006, generator_loss=4.103
1/1 [=====] - 0s 16ms/step
epoch 2955 - batch 7/10, discriminator_loss=0.005, generator_loss=4.236
1/1 [=====] - 0s 19ms/step
epoch 2955 - batch 8/10, discriminator_loss=0.004, generator_loss=3.958
1/1 [=====] - 0s 19ms/step
epoch 2955 - batch 9/10, discriminator_loss=0.003, generator_loss=4.027
1/1 [=====] - 0s 20ms/step
epoch 2955 - batch 10/10, discriminator_loss=0.006, generator_loss=4.154
1/1 [=====] - 0s 18ms/step
epoch 2956 - batch 1/10, discriminator_loss=0.009, generator_loss=3.790
1/1 [=====] - 0s 23ms/step
epoch 2956 - batch 2/10, discriminator_loss=0.341, generator_loss=3.964
1/1 [=====] - 0s 17ms/step
epoch 2956 - batch 3/10, discriminator_loss=0.012, generator_loss=3.775
1/1 [=====] - 0s 29ms/step
epoch 2956 - batch 4/10, discriminator_loss=0.023, generator_loss=3.872
1/1 [=====] - 0s 26ms/step
epoch 2956 - batch 5/10, discriminator_loss=0.010, generator_loss=3.695
1/1 [=====] - 0s 26ms/step
epoch 2956 - batch 6/10, discriminator_loss=0.004, generator_loss=4.151
1/1 [=====] - 0s 23ms/step
epoch 2956 - batch 7/10, discriminator_loss=0.016, generator_loss=4.098
1/1 [=====] - 0s 17ms/step
epoch 2956 - batch 8/10, discriminator_loss=0.005, generator_loss=3.719
1/1 [=====] - 0s 16ms/step
epoch 2956 - batch 9/10, discriminator_loss=0.006, generator_loss=3.878
1/1 [=====] - 0s 16ms/step
epoch 2956 - batch 10/10, discriminator_loss=0.002, generator_loss=4.503
1/1 [=====] - 0s 20ms/step
epoch 2957 - batch 1/10, discriminator_loss=0.011, generator_loss=4.671
1/1 [=====] - 0s 23ms/step
epoch 2957 - batch 2/10, discriminator_loss=0.320, generator_loss=4.007
1/1 [=====] - 0s 24ms/step
epoch 2957 - batch 3/10, discriminator_loss=0.006, generator_loss=4.135
1/1 [=====] - 0s 18ms/step
epoch 2957 - batch 4/10, discriminator_loss=0.649, generator_loss=3.965
1/1 [=====] - 0s 17ms/step
epoch 2957 - batch 5/10, discriminator_loss=0.023, generator_loss=3.495
1/1 [=====] - 0s 16ms/step
epoch 2957 - batch 6/10, discriminator_loss=0.009, generator_loss=3.139
1/1 [=====] - 0s 18ms/step
epoch 2957 - batch 7/10, discriminator_loss=0.009, generator_loss=3.050

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1/1 [=====] - 0s 21ms/step
epoch 2957 - batch 8/10, discriminator_loss=0.013, generator_loss=2.951
1/1 [=====] - 0s 28ms/step
epoch 2957 - batch 9/10, discriminator_loss=0.031, generator_loss=2.857
1/1 [=====] - 0s 25ms/step
epoch 2957 - batch 10/10, discriminator_loss=0.042, generator_loss=2.756
1/1 [=====] - 0s 25ms/step
epoch 2958 - batch 1/10, discriminator_loss=0.008, generator_loss=2.952
1/1 [=====] - 0s 24ms/step
epoch 2958 - batch 2/10, discriminator_loss=0.006, generator_loss=3.031
1/1 [=====] - 0s 24ms/step
epoch 2958 - batch 3/10, discriminator_loss=0.007, generator_loss=3.170
1/1 [=====] - 0s 28ms/step
epoch 2958 - batch 4/10, discriminator_loss=0.009, generator_loss=3.389
1/1 [=====] - 0s 22ms/step
epoch 2958 - batch 5/10, discriminator_loss=0.010, generator_loss=3.713
1/1 [=====] - 0s 21ms/step
epoch 2958 - batch 6/10, discriminator_loss=0.006, generator_loss=3.697
1/1 [=====] - 0s 17ms/step
epoch 2958 - batch 7/10, discriminator_loss=0.011, generator_loss=4.005
1/1 [=====] - 0s 20ms/step
epoch 2958 - batch 8/10, discriminator_loss=0.513, generator_loss=3.563
1/1 [=====] - 0s 17ms/step
epoch 2958 - batch 9/10, discriminator_loss=0.012, generator_loss=3.801
1/1 [=====] - 0s 17ms/step
epoch 2958 - batch 10/10, discriminator_loss=0.015, generator_loss=3.479
1/1 [=====] - 0s 22ms/step
epoch 2959 - batch 1/10, discriminator_loss=0.015, generator_loss=3.632
1/1 [=====] - 0s 24ms/step
epoch 2959 - batch 2/10, discriminator_loss=0.012, generator_loss=3.935
1/1 [=====] - 0s 17ms/step
epoch 2959 - batch 3/10, discriminator_loss=0.021, generator_loss=4.154
1/1 [=====] - 0s 16ms/step
epoch 2959 - batch 4/10, discriminator_loss=0.009, generator_loss=4.393
1/1 [=====] - 0s 22ms/step
epoch 2959 - batch 5/10, discriminator_loss=0.004, generator_loss=4.412
1/1 [=====] - 0s 22ms/step
epoch 2959 - batch 6/10, discriminator_loss=0.004, generator_loss=4.510
1/1 [=====] - 0s 26ms/step
epoch 2959 - batch 7/10, discriminator_loss=0.008, generator_loss=5.284
1/1 [=====] - 0s 18ms/step
epoch 2959 - batch 8/10, discriminator_loss=0.554, generator_loss=4.819
1/1 [=====] - 0s 23ms/step
epoch 2959 - batch 9/10, discriminator_loss=0.005, generator_loss=4.662
1/1 [=====] - 0s 16ms/step
epoch 2959 - batch 10/10, discriminator_loss=0.009, generator_loss=3.880
1/1 [=====] - 0s 18ms/step
epoch 2960 - batch 1/10, discriminator_loss=0.255, generator_loss=3.262

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1/1 [=====] - 0s 18ms/step
epoch 2960 - batch 2/10, discriminator_loss=0.018, generator_loss=2.988
1/1 [=====] - 0s 24ms/step
epoch 2960 - batch 3/10, discriminator_loss=0.193, generator_loss=2.439
1/1 [=====] - 0s 21ms/step
epoch 2960 - batch 4/10, discriminator_loss=0.017, generator_loss=2.087
1/1 [=====] - 0s 17ms/step
epoch 2960 - batch 5/10, discriminator_loss=0.019, generator_loss=1.850
1/1 [=====] - 0s 19ms/step
epoch 2960 - batch 6/10, discriminator_loss=0.031, generator_loss=1.752
1/1 [=====] - 0s 17ms/step
epoch 2960 - batch 7/10, discriminator_loss=0.055, generator_loss=1.608
1/1 [=====] - 0s 20ms/step
epoch 2960 - batch 8/10, discriminator_loss=0.023, generator_loss=1.791
1/1 [=====] - 0s 18ms/step
epoch 2960 - batch 9/10, discriminator_loss=0.015, generator_loss=1.966
1/1 [=====] - 0s 25ms/step
epoch 2960 - batch 10/10, discriminator_loss=0.061, generator_loss=2.214
1/1 [=====] - 0s 28ms/step
epoch 2961 - batch 1/10, discriminator_loss=0.036, generator_loss=2.381
1/1 [=====] - 0s 25ms/step
epoch 2961 - batch 2/10, discriminator_loss=0.015, generator_loss=2.310
1/1 [=====] - 0s 17ms/step
epoch 2961 - batch 3/10, discriminator_loss=0.025, generator_loss=3.112
1/1 [=====] - 0s 22ms/step
epoch 2961 - batch 4/10, discriminator_loss=0.013, generator_loss=2.908
1/1 [=====] - 0s 18ms/step
epoch 2961 - batch 5/10, discriminator_loss=0.254, generator_loss=3.018
1/1 [=====] - 0s 18ms/step
epoch 2961 - batch 6/10, discriminator_loss=0.246, generator_loss=3.367
1/1 [=====] - 0s 17ms/step
epoch 2961 - batch 7/10, discriminator_loss=0.012, generator_loss=3.571
1/1 [=====] - 0s 24ms/step
epoch 2961 - batch 8/10, discriminator_loss=0.005, generator_loss=3.459
1/1 [=====] - 0s 22ms/step
epoch 2961 - batch 9/10, discriminator_loss=0.006, generator_loss=3.558
1/1 [=====] - 0s 22ms/step
epoch 2961 - batch 10/10, discriminator_loss=0.005, generator_loss=3.369
4/4 [=====] - 0s 54ms/step
Accuracy réelle : 97%, fausse : 100%
1/1 [=====] - 0s 19ms/step
epoch 2962 - batch 1/10, discriminator_loss=0.003, generator_loss=3.329
1/1 [=====] - 0s 21ms/step
epoch 2962 - batch 2/10, discriminator_loss=0.005, generator_loss=3.906
1/1 [=====] - 0s 21ms/step
epoch 2962 - batch 3/10, discriminator_loss=0.005, generator_loss=3.620
1/1 [=====] - 0s 20ms/step
epoch 2962 - batch 4/10, discriminator_loss=0.015, generator_loss=3.798

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1/1 [=====] - 0s 23ms/step
epoch 2962 - batch 5/10, discriminator_loss=0.013, generator_loss=4.037
1/1 [=====] - 0s 21ms/step
epoch 2962 - batch 6/10, discriminator_loss=0.263, generator_loss=3.546
1/1 [=====] - 0s 20ms/step
epoch 2962 - batch 7/10, discriminator_loss=0.007, generator_loss=3.856
1/1 [=====] - 0s 16ms/step
epoch 2962 - batch 8/10, discriminator_loss=0.003, generator_loss=3.753
1/1 [=====] - 0s 19ms/step
epoch 2962 - batch 9/10, discriminator_loss=0.231, generator_loss=3.638
1/1 [=====] - 0s 20ms/step
epoch 2962 - batch 10/10, discriminator_loss=0.017, generator_loss=3.513
1/1 [=====] - 0s 23ms/step
epoch 2963 - batch 1/10, discriminator_loss=0.004, generator_loss=3.390
1/1 [=====] - 0s 18ms/step
epoch 2963 - batch 2/10, discriminator_loss=0.008, generator_loss=3.428
1/1 [=====] - 0s 20ms/step
epoch 2963 - batch 3/10, discriminator_loss=0.015, generator_loss=3.430
1/1 [=====] - 0s 22ms/step
epoch 2963 - batch 4/10, discriminator_loss=0.459, generator_loss=3.174
1/1 [=====] - 0s 23ms/step
epoch 2963 - batch 5/10, discriminator_loss=0.012, generator_loss=3.327
1/1 [=====] - 0s 18ms/step
epoch 2963 - batch 6/10, discriminator_loss=0.449, generator_loss=2.865
1/1 [=====] - 0s 20ms/step
epoch 2963 - batch 7/10, discriminator_loss=0.015, generator_loss=2.332
1/1 [=====] - 0s 21ms/step
epoch 2963 - batch 8/10, discriminator_loss=0.062, generator_loss=2.455
1/1 [=====] - 0s 17ms/step
epoch 2963 - batch 9/10, discriminator_loss=0.025, generator_loss=2.669
1/1 [=====] - 0s 18ms/step
epoch 2963 - batch 10/10, discriminator_loss=0.026, generator_loss=2.813
1/1 [=====] - 0s 24ms/step
epoch 2964 - batch 1/10, discriminator_loss=0.037, generator_loss=3.224
1/1 [=====] - 0s 22ms/step
epoch 2964 - batch 2/10, discriminator_loss=0.037, generator_loss=3.465
1/1 [=====] - 0s 20ms/step
epoch 2964 - batch 3/10, discriminator_loss=0.006, generator_loss=4.295
1/1 [=====] - 0s 23ms/step
epoch 2964 - batch 4/10, discriminator_loss=0.588, generator_loss=3.794
1/1 [=====] - 0s 21ms/step
epoch 2964 - batch 5/10, discriminator_loss=0.018, generator_loss=3.638
1/1 [=====] - 0s 18ms/step
epoch 2964 - batch 6/10, discriminator_loss=0.023, generator_loss=3.906
1/1 [=====] - 0s 24ms/step
epoch 2964 - batch 7/10, discriminator_loss=0.027, generator_loss=4.112
1/1 [=====] - 0s 24ms/step
epoch 2964 - batch 8/10, discriminator_loss=0.436, generator_loss=3.791

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1/1 [=====] - 0s 18ms/step
epoch 2964 - batch 9/10, discriminator_loss=0.020, generator_loss=3.106
1/1 [=====] - 0s 17ms/step
epoch 2964 - batch 10/10, discriminator_loss=0.014, generator_loss=2.968
1/1 [=====] - 0s 21ms/step
epoch 2965 - batch 1/10, discriminator_loss=0.017, generator_loss=2.776
1/1 [=====] - 0s 23ms/step
epoch 2965 - batch 2/10, discriminator_loss=0.022, generator_loss=2.691
1/1 [=====] - 0s 18ms/step
epoch 2965 - batch 3/10, discriminator_loss=0.021, generator_loss=2.755
1/1 [=====] - 0s 19ms/step
epoch 2965 - batch 4/10, discriminator_loss=0.041, generator_loss=2.951
1/1 [=====] - 0s 17ms/step
epoch 2965 - batch 5/10, discriminator_loss=0.018, generator_loss=3.534
1/1 [=====] - 0s 24ms/step
epoch 2965 - batch 6/10, discriminator_loss=0.011, generator_loss=3.654
1/1 [=====] - 0s 24ms/step
epoch 2965 - batch 7/10, discriminator_loss=0.009, generator_loss=3.987
1/1 [=====] - 0s 22ms/step
epoch 2965 - batch 8/10, discriminator_loss=0.014, generator_loss=4.456
1/1 [=====] - 0s 19ms/step
epoch 2965 - batch 9/10, discriminator_loss=0.009, generator_loss=4.848
1/1 [=====] - 0s 16ms/step
epoch 2965 - batch 10/10, discriminator_loss=0.008, generator_loss=5.239
1/1 [=====] - 0s 17ms/step
epoch 2966 - batch 1/10, discriminator_loss=0.005, generator_loss=5.996
1/1 [=====] - 0s 20ms/step
epoch 2966 - batch 2/10, discriminator_loss=0.003, generator_loss=6.420
1/1 [=====] - 0s 21ms/step
epoch 2966 - batch 3/10, discriminator_loss=0.006, generator_loss=6.651
1/1 [=====] - 0s 17ms/step
epoch 2966 - batch 4/10, discriminator_loss=0.002, generator_loss=7.239
1/1 [=====] - 0s 16ms/step
epoch 2966 - batch 5/10, discriminator_loss=0.003, generator_loss=7.329
1/1 [=====] - 0s 17ms/step
epoch 2966 - batch 6/10, discriminator_loss=0.003, generator_loss=7.621
1/1 [=====] - 0s 17ms/step
epoch 2966 - batch 7/10, discriminator_loss=0.002, generator_loss=8.714
1/1 [=====] - 0s 21ms/step
epoch 2966 - batch 8/10, discriminator_loss=0.003, generator_loss=8.224
1/1 [=====] - 0s 16ms/step
epoch 2966 - batch 9/10, discriminator_loss=0.001, generator_loss=7.999
1/1 [=====] - 0s 18ms/step
epoch 2966 - batch 10/10, discriminator_loss=0.001, generator_loss=8.468
1/1 [=====] - 0s 22ms/step
epoch 2967 - batch 1/10, discriminator_loss=0.001, generator_loss=8.624
1/1 [=====] - 0s 17ms/step
epoch 2967 - batch 2/10, discriminator_loss=0.001, generator_loss=8.858

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1/1 [=====] - 0s 16ms/step
epoch 2967 - batch 3/10, discriminator_loss=0.001, generator_loss=9.075
1/1 [=====] - 0s 23ms/step
epoch 2967 - batch 4/10, discriminator_loss=0.001, generator_loss=9.183
1/1 [=====] - 0s 23ms/step
epoch 2967 - batch 5/10, discriminator_loss=0.727, generator_loss=8.182
1/1 [=====] - 0s 20ms/step
epoch 2967 - batch 6/10, discriminator_loss=0.001, generator_loss=7.851
1/1 [=====] - 0s 19ms/step
epoch 2967 - batch 7/10, discriminator_loss=0.001, generator_loss=6.812
1/1 [=====] - 0s 17ms/step
epoch 2967 - batch 8/10, discriminator_loss=0.002, generator_loss=6.603
1/1 [=====] - 0s 18ms/step
epoch 2967 - batch 9/10, discriminator_loss=0.003, generator_loss=5.864
1/1 [=====] - 0s 19ms/step
epoch 2967 - batch 10/10, discriminator_loss=0.002, generator_loss=5.378
1/1 [=====] - 0s 23ms/step
epoch 2968 - batch 1/10, discriminator_loss=0.006, generator_loss=5.182
1/1 [=====] - 0s 19ms/step
epoch 2968 - batch 2/10, discriminator_loss=0.006, generator_loss=4.716
1/1 [=====] - 0s 23ms/step
epoch 2968 - batch 3/10, discriminator_loss=0.003, generator_loss=4.563
1/1 [=====] - 0s 24ms/step
epoch 2968 - batch 4/10, discriminator_loss=0.007, generator_loss=4.420
1/1 [=====] - 0s 17ms/step
epoch 2968 - batch 5/10, discriminator_loss=0.005, generator_loss=4.339
1/1 [=====] - 0s 21ms/step
epoch 2968 - batch 6/10, discriminator_loss=0.007, generator_loss=4.986
1/1 [=====] - 0s 23ms/step
epoch 2968 - batch 7/10, discriminator_loss=0.005, generator_loss=4.218
1/1 [=====] - 0s 24ms/step
epoch 2968 - batch 8/10, discriminator_loss=0.004, generator_loss=4.550
1/1 [=====] - 0s 27ms/step
epoch 2968 - batch 9/10, discriminator_loss=0.006, generator_loss=4.428
1/1 [=====] - 0s 27ms/step
epoch 2968 - batch 10/10, discriminator_loss=0.007, generator_loss=4.498
1/1 [=====] - 0s 21ms/step
epoch 2969 - batch 1/10, discriminator_loss=0.005, generator_loss=4.338
1/1 [=====] - 0s 24ms/step
epoch 2969 - batch 2/10, discriminator_loss=0.004, generator_loss=4.749
1/1 [=====] - 0s 17ms/step
epoch 2969 - batch 3/10, discriminator_loss=0.006, generator_loss=4.459
1/1 [=====] - 0s 18ms/step
epoch 2969 - batch 4/10, discriminator_loss=0.003, generator_loss=4.767
1/1 [=====] - 0s 29ms/step
epoch 2969 - batch 5/10, discriminator_loss=0.003, generator_loss=4.862
1/1 [=====] - 0s 25ms/step
epoch 2969 - batch 6/10, discriminator_loss=0.009, generator_loss=5.170

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1/1 [=====] - 0s 17ms/step
epoch 2969 - batch 7/10, discriminator_loss=0.543, generator_loss=4.467
1/1 [=====] - 0s 23ms/step
epoch 2969 - batch 8/10, discriminator_loss=0.501, generator_loss=3.672
1/1 [=====] - 0s 18ms/step
epoch 2969 - batch 9/10, discriminator_loss=0.003, generator_loss=3.294
1/1 [=====] - 0s 21ms/step
epoch 2969 - batch 10/10, discriminator_loss=0.009, generator_loss=2.839
1/1 [=====] - 0s 20ms/step
epoch 2970 - batch 1/10, discriminator_loss=0.015, generator_loss=2.521
1/1 [=====] - 0s 20ms/step
epoch 2970 - batch 2/10, discriminator_loss=0.016, generator_loss=2.012
1/1 [=====] - 0s 17ms/step
epoch 2970 - batch 3/10, discriminator_loss=0.060, generator_loss=1.872
1/1 [=====] - 0s 27ms/step
epoch 2970 - batch 4/10, discriminator_loss=0.020, generator_loss=1.620
1/1 [=====] - 0s 25ms/step
epoch 2970 - batch 5/10, discriminator_loss=0.030, generator_loss=1.694
1/1 [=====] - 0s 25ms/step
epoch 2970 - batch 6/10, discriminator_loss=0.033, generator_loss=1.691
1/1 [=====] - 0s 22ms/step
epoch 2970 - batch 7/10, discriminator_loss=0.021, generator_loss=1.876
1/1 [=====] - 0s 26ms/step
epoch 2970 - batch 8/10, discriminator_loss=0.023, generator_loss=1.951
1/1 [=====] - 0s 23ms/step
epoch 2970 - batch 9/10, discriminator_loss=0.014, generator_loss=1.926
1/1 [=====] - 0s 19ms/step
epoch 2970 - batch 10/10, discriminator_loss=0.013, generator_loss=2.324
1/1 [=====] - 0s 19ms/step
epoch 2971 - batch 1/10, discriminator_loss=0.007, generator_loss=2.138
1/1 [=====] - 0s 21ms/step
epoch 2971 - batch 2/10, discriminator_loss=0.029, generator_loss=2.657
1/1 [=====] - 0s 25ms/step
epoch 2971 - batch 3/10, discriminator_loss=0.024, generator_loss=2.624
1/1 [=====] - 0s 24ms/step
epoch 2971 - batch 4/10, discriminator_loss=0.319, generator_loss=2.720
1/1 [=====] - 0s 19ms/step
epoch 2971 - batch 5/10, discriminator_loss=0.008, generator_loss=2.889
1/1 [=====] - 0s 16ms/step
epoch 2971 - batch 6/10, discriminator_loss=0.005, generator_loss=2.833
1/1 [=====] - 0s 20ms/step
epoch 2971 - batch 7/10, discriminator_loss=0.015, generator_loss=2.827
1/1 [=====] - 0s 17ms/step
epoch 2971 - batch 8/10, discriminator_loss=0.337, generator_loss=3.080
1/1 [=====] - 0s 29ms/step
epoch 2971 - batch 9/10, discriminator_loss=0.012, generator_loss=2.868
1/1 [=====] - 0s 25ms/step
epoch 2971 - batch 10/10, discriminator_loss=0.010, generator_loss=3.121

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1/1 [=====] - 0s 23ms/step
epoch 2972 - batch 1/10, discriminator_loss=0.006, generator_loss=3.251
1/1 [=====] - 0s 19ms/step
epoch 2972 - batch 2/10, discriminator_loss=0.013, generator_loss=3.461
1/1 [=====] - 0s 18ms/step
epoch 2972 - batch 3/10, discriminator_loss=0.005, generator_loss=3.628
1/1 [=====] - 0s 22ms/step
epoch 2972 - batch 4/10, discriminator_loss=0.008, generator_loss=3.765
1/1 [=====] - 0s 22ms/step
epoch 2972 - batch 5/10, discriminator_loss=0.007, generator_loss=3.695
1/1 [=====] - 0s 20ms/step
epoch 2972 - batch 6/10, discriminator_loss=0.009, generator_loss=3.928
1/1 [=====] - 0s 23ms/step
epoch 2972 - batch 7/10, discriminator_loss=0.006, generator_loss=3.984
1/1 [=====] - 0s 27ms/step
epoch 2972 - batch 8/10, discriminator_loss=0.004, generator_loss=4.325
1/1 [=====] - 0s 21ms/step
epoch 2972 - batch 9/10, discriminator_loss=0.005, generator_loss=4.597
1/1 [=====] - 0s 21ms/step
epoch 2972 - batch 10/10, discriminator_loss=0.004, generator_loss=4.945
1/1 [=====] - 0s 24ms/step
epoch 2973 - batch 1/10, discriminator_loss=0.002, generator_loss=5.301
1/1 [=====] - 0s 24ms/step
epoch 2973 - batch 2/10, discriminator_loss=0.003, generator_loss=5.170
1/1 [=====] - 0s 17ms/step
epoch 2973 - batch 3/10, discriminator_loss=0.006, generator_loss=5.050
1/1 [=====] - 0s 17ms/step
epoch 2973 - batch 4/10, discriminator_loss=0.018, generator_loss=5.489
1/1 [=====] - 0s 20ms/step
epoch 2973 - batch 5/10, discriminator_loss=0.005, generator_loss=5.798
1/1 [=====] - 0s 24ms/step
epoch 2973 - batch 6/10, discriminator_loss=0.002, generator_loss=6.232
1/1 [=====] - 0s 18ms/step
epoch 2973 - batch 7/10, discriminator_loss=0.001, generator_loss=7.011
1/1 [=====] - 0s 16ms/step
epoch 2973 - batch 8/10, discriminator_loss=0.001, generator_loss=7.536
1/1 [=====] - 0s 19ms/step
epoch 2973 - batch 9/10, discriminator_loss=0.001, generator_loss=7.420
1/1 [=====] - 0s 16ms/step
epoch 2973 - batch 10/10, discriminator_loss=0.474, generator_loss=7.057
1/1 [=====] - 0s 18ms/step
epoch 2974 - batch 1/10, discriminator_loss=0.001, generator_loss=6.334
1/1 [=====] - 0s 22ms/step
epoch 2974 - batch 2/10, discriminator_loss=0.001, generator_loss=5.993
1/1 [=====] - 0s 19ms/step
epoch 2974 - batch 3/10, discriminator_loss=0.002, generator_loss=5.304
1/1 [=====] - 0s 24ms/step
epoch 2974 - batch 4/10, discriminator_loss=0.003, generator_loss=4.753

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1/1 [=====] - 0s 22ms/step
epoch 2974 - batch 5/10, discriminator_loss=0.004, generator_loss=4.440
1/1 [=====] - 0s 18ms/step
epoch 2974 - batch 6/10, discriminator_loss=0.004, generator_loss=4.653
1/1 [=====] - 0s 21ms/step
epoch 2974 - batch 7/10, discriminator_loss=0.006, generator_loss=4.201
1/1 [=====] - 0s 19ms/step
epoch 2974 - batch 8/10, discriminator_loss=0.006, generator_loss=4.178
1/1 [=====] - 0s 16ms/step
epoch 2974 - batch 9/10, discriminator_loss=0.004, generator_loss=3.967
1/1 [=====] - 0s 27ms/step
epoch 2974 - batch 10/10, discriminator_loss=0.004, generator_loss=4.275
1/1 [=====] - 0s 18ms/step
epoch 2975 - batch 1/10, discriminator_loss=0.004, generator_loss=3.676
1/1 [=====] - 0s 22ms/step
epoch 2975 - batch 2/10, discriminator_loss=0.005, generator_loss=4.257
1/1 [=====] - 0s 28ms/step
epoch 2975 - batch 3/10, discriminator_loss=0.002, generator_loss=4.062
1/1 [=====] - 0s 23ms/step
epoch 2975 - batch 4/10, discriminator_loss=0.005, generator_loss=3.970
1/1 [=====] - 0s 16ms/step
epoch 2975 - batch 5/10, discriminator_loss=0.004, generator_loss=3.957
1/1 [=====] - 0s 23ms/step
epoch 2975 - batch 6/10, discriminator_loss=0.010, generator_loss=3.740
1/1 [=====] - 0s 19ms/step
epoch 2975 - batch 7/10, discriminator_loss=0.359, generator_loss=3.963
1/1 [=====] - 0s 23ms/step
epoch 2975 - batch 8/10, discriminator_loss=0.006, generator_loss=3.608
1/1 [=====] - 0s 25ms/step
epoch 2975 - batch 9/10, discriminator_loss=0.007, generator_loss=3.886
1/1 [=====] - 0s 22ms/step
epoch 2975 - batch 10/10, discriminator_loss=0.008, generator_loss=3.332
1/1 [=====] - 0s 22ms/step
epoch 2976 - batch 1/10, discriminator_loss=0.020, generator_loss=3.520
1/1 [=====] - 0s 21ms/step
epoch 2976 - batch 2/10, discriminator_loss=0.013, generator_loss=3.327
1/1 [=====] - 0s 23ms/step
epoch 2976 - batch 3/10, discriminator_loss=0.016, generator_loss=3.466
1/1 [=====] - 0s 22ms/step
epoch 2976 - batch 4/10, discriminator_loss=0.011, generator_loss=3.543
1/1 [=====] - 0s 23ms/step
epoch 2976 - batch 5/10, discriminator_loss=0.009, generator_loss=3.546
1/1 [=====] - 0s 16ms/step
epoch 2976 - batch 6/10, discriminator_loss=0.006, generator_loss=3.632
1/1 [=====] - 0s 18ms/step
epoch 2976 - batch 7/10, discriminator_loss=0.009, generator_loss=4.404
1/1 [=====] - 0s 18ms/step
epoch 2976 - batch 8/10, discriminator_loss=0.010, generator_loss=4.192

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1/1 [=====] - 0s 23ms/step
epoch 2976 - batch 9/10, discriminator_loss=0.009, generator_loss=4.151
1/1 [=====] - 0s 20ms/step
epoch 2976 - batch 10/10, discriminator_loss=0.007, generator_loss=4.574
1/1 [=====] - 0s 17ms/step
epoch 2977 - batch 1/10, discriminator_loss=0.005, generator_loss=4.529
1/1 [=====] - 0s 24ms/step
epoch 2977 - batch 2/10, discriminator_loss=0.005, generator_loss=4.876
1/1 [=====] - 0s 21ms/step
epoch 2977 - batch 3/10, discriminator_loss=0.006, generator_loss=5.102
1/1 [=====] - 0s 19ms/step
epoch 2977 - batch 4/10, discriminator_loss=0.006, generator_loss=5.296
1/1 [=====] - 0s 26ms/step
epoch 2977 - batch 5/10, discriminator_loss=0.002, generator_loss=5.409
1/1 [=====] - 0s 22ms/step
epoch 2977 - batch 6/10, discriminator_loss=0.005, generator_loss=5.387
1/1 [=====] - 0s 25ms/step
epoch 2977 - batch 7/10, discriminator_loss=0.002, generator_loss=5.917
1/1 [=====] - 0s 21ms/step
epoch 2977 - batch 8/10, discriminator_loss=0.002, generator_loss=5.947
1/1 [=====] - 0s 16ms/step
epoch 2977 - batch 9/10, discriminator_loss=0.002, generator_loss=6.626
1/1 [=====] - 0s 21ms/step
epoch 2977 - batch 10/10, discriminator_loss=0.002, generator_loss=7.491
1/1 [=====] - 0s 23ms/step
epoch 2978 - batch 1/10, discriminator_loss=0.002, generator_loss=7.497
1/1 [=====] - 0s 22ms/step
epoch 2978 - batch 2/10, discriminator_loss=0.001, generator_loss=7.310
1/1 [=====] - 0s 18ms/step
epoch 2978 - batch 3/10, discriminator_loss=0.682, generator_loss=6.773
1/1 [=====] - 0s 22ms/step
epoch 2978 - batch 4/10, discriminator_loss=0.566, generator_loss=5.598
1/1 [=====] - 0s 18ms/step
epoch 2978 - batch 5/10, discriminator_loss=0.002, generator_loss=5.534
1/1 [=====] - 0s 21ms/step
epoch 2978 - batch 6/10, discriminator_loss=0.354, generator_loss=4.278
1/1 [=====] - 0s 23ms/step
epoch 2978 - batch 7/10, discriminator_loss=0.014, generator_loss=3.809
1/1 [=====] - 0s 25ms/step
epoch 2978 - batch 8/10, discriminator_loss=0.006, generator_loss=3.123
1/1 [=====] - 0s 18ms/step
epoch 2978 - batch 9/10, discriminator_loss=0.008, generator_loss=2.859
1/1 [=====] - 0s 17ms/step
epoch 2978 - batch 10/10, discriminator_loss=0.024, generator_loss=2.587
1/1 [=====] - 0s 18ms/step
epoch 2979 - batch 1/10, discriminator_loss=0.017, generator_loss=2.410
1/1 [=====] - 0s 28ms/step
epoch 2979 - batch 2/10, discriminator_loss=0.015, generator_loss=2.177

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1/1 [=====] - 0s 16ms/step
epoch 2979 - batch 3/10, discriminator_loss=0.026, generator_loss=2.345
1/1 [=====] - 0s 19ms/step
epoch 2979 - batch 4/10, discriminator_loss=0.036, generator_loss=2.280
1/1 [=====] - 0s 23ms/step
epoch 2979 - batch 5/10, discriminator_loss=0.032, generator_loss=2.267
1/1 [=====] - 0s 24ms/step
epoch 2979 - batch 6/10, discriminator_loss=0.019, generator_loss=2.415
1/1 [=====] - 0s 21ms/step
epoch 2979 - batch 7/10, discriminator_loss=0.013, generator_loss=2.677
1/1 [=====] - 0s 21ms/step
epoch 2979 - batch 8/10, discriminator_loss=0.238, generator_loss=2.693
1/1 [=====] - 0s 16ms/step
epoch 2979 - batch 9/10, discriminator_loss=0.016, generator_loss=2.678
1/1 [=====] - 0s 26ms/step
epoch 2979 - batch 10/10, discriminator_loss=0.015, generator_loss=2.670
1/1 [=====] - 0s 20ms/step
epoch 2980 - batch 1/10, discriminator_loss=0.017, generator_loss=2.955
1/1 [=====] - 0s 22ms/step
epoch 2980 - batch 2/10, discriminator_loss=0.023, generator_loss=3.130
1/1 [=====] - 0s 23ms/step
epoch 2980 - batch 3/10, discriminator_loss=0.021, generator_loss=3.218
1/1 [=====] - 0s 16ms/step
epoch 2980 - batch 4/10, discriminator_loss=0.239, generator_loss=3.099
1/1 [=====] - 0s 17ms/step
epoch 2980 - batch 5/10, discriminator_loss=0.012, generator_loss=3.507
1/1 [=====] - 0s 22ms/step
epoch 2980 - batch 6/10, discriminator_loss=0.013, generator_loss=3.875
1/1 [=====] - 0s 22ms/step
epoch 2980 - batch 7/10, discriminator_loss=0.011, generator_loss=4.151
1/1 [=====] - 0s 16ms/step
epoch 2980 - batch 8/10, discriminator_loss=0.018, generator_loss=3.852
1/1 [=====] - 0s 21ms/step
epoch 2980 - batch 9/10, discriminator_loss=0.013, generator_loss=4.063
1/1 [=====] - 0s 20ms/step
epoch 2980 - batch 10/10, discriminator_loss=0.031, generator_loss=4.568
1/1 [=====] - 0s 28ms/step
epoch 2981 - batch 1/10, discriminator_loss=0.330, generator_loss=4.583
1/1 [=====] - 0s 17ms/step
epoch 2981 - batch 2/10, discriminator_loss=0.005, generator_loss=4.270
1/1 [=====] - 0s 23ms/step
epoch 2981 - batch 3/10, discriminator_loss=0.012, generator_loss=4.304
1/1 [=====] - 0s 28ms/step
epoch 2981 - batch 4/10, discriminator_loss=0.013, generator_loss=4.210
1/1 [=====] - 0s 17ms/step
epoch 2981 - batch 5/10, discriminator_loss=0.008, generator_loss=4.421
1/1 [=====] - 0s 23ms/step
epoch 2981 - batch 6/10, discriminator_loss=0.008, generator_loss=4.311

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1/1 [=====] - 0s 22ms/step
epoch 2981 - batch 7/10, discriminator_loss=0.013, generator_loss=4.440
1/1 [=====] - 0s 19ms/step
epoch 2981 - batch 8/10, discriminator_loss=0.006, generator_loss=4.907
1/1 [=====] - 0s 19ms/step
epoch 2981 - batch 9/10, discriminator_loss=0.006, generator_loss=4.663
1/1 [=====] - 0s 18ms/step
epoch 2981 - batch 10/10, discriminator_loss=0.006, generator_loss=5.014
4/4 [=====] - 0s 53ms/step
Accuracy réelle : 95%, fausse : 100%
1/1 [=====] - 0s 19ms/step
epoch 2982 - batch 1/10, discriminator_loss=0.312, generator_loss=4.782
1/1 [=====] - 0s 16ms/step
epoch 2982 - batch 2/10, discriminator_loss=0.003, generator_loss=4.443
1/1 [=====] - 0s 17ms/step
epoch 2982 - batch 3/10, discriminator_loss=0.011, generator_loss=4.964
1/1 [=====] - 0s 19ms/step
epoch 2982 - batch 4/10, discriminator_loss=0.006, generator_loss=4.337
1/1 [=====] - 0s 34ms/step
epoch 2982 - batch 5/10, discriminator_loss=0.011, generator_loss=4.498
1/1 [=====] - 0s 24ms/step
epoch 2982 - batch 6/10, discriminator_loss=0.009, generator_loss=4.656
1/1 [=====] - 0s 23ms/step
epoch 2982 - batch 7/10, discriminator_loss=0.009, generator_loss=4.325
1/1 [=====] - 0s 26ms/step
epoch 2982 - batch 8/10, discriminator_loss=0.006, generator_loss=4.875
1/1 [=====] - 0s 23ms/step
epoch 2982 - batch 9/10, discriminator_loss=0.012, generator_loss=4.754
1/1 [=====] - 0s 26ms/step
epoch 2982 - batch 10/10, discriminator_loss=0.007, generator_loss=4.873
1/1 [=====] - 0s 24ms/step
epoch 2983 - batch 1/10, discriminator_loss=0.008, generator_loss=5.392
1/1 [=====] - 0s 21ms/step
epoch 2983 - batch 2/10, discriminator_loss=0.004, generator_loss=5.108
1/1 [=====] - 0s 21ms/step
epoch 2983 - batch 3/10, discriminator_loss=0.003, generator_loss=5.252
1/1 [=====] - 0s 28ms/step
epoch 2983 - batch 4/10, discriminator_loss=0.005, generator_loss=5.568
1/1 [=====] - 0s 16ms/step
epoch 2983 - batch 5/10, discriminator_loss=0.004, generator_loss=5.598
1/1 [=====] - 0s 15ms/step
epoch 2983 - batch 6/10, discriminator_loss=0.005, generator_loss=5.956
1/1 [=====] - 0s 16ms/step
epoch 2983 - batch 7/10, discriminator_loss=0.004, generator_loss=5.754
1/1 [=====] - 0s 19ms/step
epoch 2983 - batch 8/10, discriminator_loss=0.658, generator_loss=5.166
1/1 [=====] - 0s 17ms/step
epoch 2983 - batch 9/10, discriminator_loss=0.002, generator_loss=4.845

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1/1 [=====] - 0s 16ms/step
epoch 2983 - batch 10/10, discriminator_loss=0.007, generator_loss=4.920
1/1 [=====] - 0s 24ms/step
epoch 2984 - batch 1/10, discriminator_loss=0.005, generator_loss=4.274
1/1 [=====] - 0s 17ms/step
epoch 2984 - batch 2/10, discriminator_loss=0.004, generator_loss=4.584
1/1 [=====] - 0s 18ms/step
epoch 2984 - batch 3/10, discriminator_loss=0.007, generator_loss=4.218
1/1 [=====] - 0s 16ms/step
epoch 2984 - batch 4/10, discriminator_loss=0.007, generator_loss=3.878
1/1 [=====] - 0s 19ms/step
epoch 2984 - batch 5/10, discriminator_loss=0.006, generator_loss=3.736
1/1 [=====] - 0s 16ms/step
epoch 2984 - batch 6/10, discriminator_loss=0.005, generator_loss=3.919
1/1 [=====] - 0s 15ms/step
epoch 2984 - batch 7/10, discriminator_loss=0.009, generator_loss=3.689
1/1 [=====] - 0s 18ms/step
epoch 2984 - batch 8/10, discriminator_loss=0.013, generator_loss=3.596
1/1 [=====] - 0s 18ms/step
epoch 2984 - batch 9/10, discriminator_loss=0.010, generator_loss=3.993
1/1 [=====] - 0s 16ms/step
epoch 2984 - batch 10/10, discriminator_loss=0.008, generator_loss=4.037
1/1 [=====] - 0s 22ms/step
epoch 2985 - batch 1/10, discriminator_loss=0.010, generator_loss=4.521
1/1 [=====] - 0s 16ms/step
epoch 2985 - batch 2/10, discriminator_loss=0.012, generator_loss=4.659
1/1 [=====] - 0s 16ms/step
epoch 2985 - batch 3/10, discriminator_loss=0.011, generator_loss=4.617
1/1 [=====] - 0s 21ms/step
epoch 2985 - batch 4/10, discriminator_loss=0.003, generator_loss=4.754
1/1 [=====] - 0s 19ms/step
epoch 2985 - batch 5/10, discriminator_loss=0.004, generator_loss=4.868
1/1 [=====] - 0s 20ms/step
epoch 2985 - batch 6/10, discriminator_loss=0.005, generator_loss=4.870
1/1 [=====] - 0s 23ms/step
epoch 2985 - batch 7/10, discriminator_loss=0.009, generator_loss=4.824
1/1 [=====] - 0s 18ms/step
epoch 2985 - batch 8/10, discriminator_loss=0.006, generator_loss=4.969
1/1 [=====] - 0s 18ms/step
epoch 2985 - batch 9/10, discriminator_loss=0.006, generator_loss=5.394
1/1 [=====] - 0s 16ms/step
epoch 2985 - batch 10/10, discriminator_loss=0.003, generator_loss=5.466
1/1 [=====] - 0s 20ms/step
epoch 2986 - batch 1/10, discriminator_loss=0.002, generator_loss=5.534
1/1 [=====] - 0s 17ms/step
epoch 2986 - batch 2/10, discriminator_loss=0.002, generator_loss=5.629
1/1 [=====] - 0s 16ms/step
epoch 2986 - batch 3/10, discriminator_loss=0.002, generator_loss=5.999

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1/1 [=====] - 0s 17ms/step
epoch 2986 - batch 4/10, discriminator_loss=0.004, generator_loss=5.801
1/1 [=====] - 0s 27ms/step
epoch 2986 - batch 5/10, discriminator_loss=0.004, generator_loss=6.008
1/1 [=====] - 0s 17ms/step
epoch 2986 - batch 6/10, discriminator_loss=0.002, generator_loss=6.752
1/1 [=====] - 0s 21ms/step
epoch 2986 - batch 7/10, discriminator_loss=0.004, generator_loss=6.927
1/1 [=====] - 0s 18ms/step
epoch 2986 - batch 8/10, discriminator_loss=0.001, generator_loss=6.493
1/1 [=====] - 0s 16ms/step
epoch 2986 - batch 9/10, discriminator_loss=0.003, generator_loss=7.162
1/1 [=====] - 0s 23ms/step
epoch 2986 - batch 10/10, discriminator_loss=0.003, generator_loss=6.908
1/1 [=====] - 0s 25ms/step
epoch 2987 - batch 1/10, discriminator_loss=0.003, generator_loss=7.243
1/1 [=====] - 0s 18ms/step
epoch 2987 - batch 2/10, discriminator_loss=0.002, generator_loss=6.788
1/1 [=====] - 0s 25ms/step
epoch 2987 - batch 3/10, discriminator_loss=0.004, generator_loss=7.083
1/1 [=====] - 0s 22ms/step
epoch 2987 - batch 4/10, discriminator_loss=0.001, generator_loss=7.529
1/1 [=====] - 0s 16ms/step
epoch 2987 - batch 5/10, discriminator_loss=0.525, generator_loss=6.975
1/1 [=====] - 0s 17ms/step
epoch 2987 - batch 6/10, discriminator_loss=0.001, generator_loss=6.252
1/1 [=====] - 0s 17ms/step
epoch 2987 - batch 7/10, discriminator_loss=0.001, generator_loss=5.608
1/1 [=====] - 0s 19ms/step
epoch 2987 - batch 8/10, discriminator_loss=0.001, generator_loss=5.328
1/1 [=====] - 0s 15ms/step
epoch 2987 - batch 9/10, discriminator_loss=0.637, generator_loss=4.468
1/1 [=====] - 0s 19ms/step
epoch 2987 - batch 10/10, discriminator_loss=0.009, generator_loss=3.677
1/1 [=====] - 0s 17ms/step
epoch 2988 - batch 1/10, discriminator_loss=0.009, generator_loss=3.081
1/1 [=====] - 0s 16ms/step
epoch 2988 - batch 2/10, discriminator_loss=0.008, generator_loss=2.666
1/1 [=====] - 0s 17ms/step
epoch 2988 - batch 3/10, discriminator_loss=0.010, generator_loss=2.407
1/1 [=====] - 0s 19ms/step
epoch 2988 - batch 4/10, discriminator_loss=0.022, generator_loss=2.271
1/1 [=====] - 0s 17ms/step
epoch 2988 - batch 5/10, discriminator_loss=0.016, generator_loss=2.093
1/1 [=====] - 0s 21ms/step
epoch 2988 - batch 6/10, discriminator_loss=0.015, generator_loss=1.984
1/1 [=====] - 0s 27ms/step
epoch 2988 - batch 7/10, discriminator_loss=0.019, generator_loss=1.827

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1/1 [=====] - 0s 25ms/step
epoch 2988 - batch 8/10, discriminator_loss=0.027, generator_loss=1.684
1/1 [=====] - 0s 24ms/step
epoch 2988 - batch 9/10, discriminator_loss=0.029, generator_loss=1.987
1/1 [=====] - 0s 18ms/step
epoch 2988 - batch 10/10, discriminator_loss=0.021, generator_loss=2.104
1/1 [=====] - 0s 23ms/step
epoch 2989 - batch 1/10, discriminator_loss=0.026, generator_loss=1.805
1/1 [=====] - 0s 22ms/step
epoch 2989 - batch 2/10, discriminator_loss=0.025, generator_loss=1.997
1/1 [=====] - 0s 20ms/step
epoch 2989 - batch 3/10, discriminator_loss=0.019, generator_loss=2.170
1/1 [=====] - 0s 19ms/step
epoch 2989 - batch 4/10, discriminator_loss=0.483, generator_loss=2.243
1/1 [=====] - 0s 16ms/step
epoch 2989 - batch 5/10, discriminator_loss=0.012, generator_loss=1.996
1/1 [=====] - 0s 26ms/step
epoch 2989 - batch 6/10, discriminator_loss=0.023, generator_loss=2.409
1/1 [=====] - 0s 22ms/step
epoch 2989 - batch 7/10, discriminator_loss=0.016, generator_loss=2.217
1/1 [=====] - 0s 17ms/step
epoch 2989 - batch 8/10, discriminator_loss=0.010, generator_loss=2.364
1/1 [=====] - 0s 25ms/step
epoch 2989 - batch 9/10, discriminator_loss=0.006, generator_loss=2.320
1/1 [=====] - 0s 33ms/step
epoch 2989 - batch 10/10, discriminator_loss=0.010, generator_loss=2.287
1/1 [=====] - 0s 20ms/step
epoch 2990 - batch 1/10, discriminator_loss=0.033, generator_loss=2.521
1/1 [=====] - 0s 21ms/step
epoch 2990 - batch 2/10, discriminator_loss=0.011, generator_loss=2.769
1/1 [=====] - 0s 17ms/step
epoch 2990 - batch 3/10, discriminator_loss=0.007, generator_loss=2.957
1/1 [=====] - 0s 17ms/step
epoch 2990 - batch 4/10, discriminator_loss=0.015, generator_loss=3.132
1/1 [=====] - 0s 25ms/step
epoch 2990 - batch 5/10, discriminator_loss=0.006, generator_loss=3.733
1/1 [=====] - 0s 22ms/step
epoch 2990 - batch 6/10, discriminator_loss=0.007, generator_loss=3.684
1/1 [=====] - 0s 24ms/step
epoch 2990 - batch 7/10, discriminator_loss=0.007, generator_loss=3.655
1/1 [=====] - 0s 21ms/step
epoch 2990 - batch 8/10, discriminator_loss=0.002, generator_loss=4.050
1/1 [=====] - 0s 20ms/step
epoch 2990 - batch 9/10, discriminator_loss=0.006, generator_loss=4.438
1/1 [=====] - 0s 21ms/step
epoch 2990 - batch 10/10, discriminator_loss=0.002, generator_loss=4.442
1/1 [=====] - 0s 23ms/step
epoch 2991 - batch 1/10, discriminator_loss=0.005, generator_loss=4.686

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1/1 [=====] - 0s 29ms/step
epoch 2991 - batch 2/10, discriminator_loss=0.002, generator_loss=5.014
1/1 [=====] - 0s 33ms/step
epoch 2991 - batch 3/10, discriminator_loss=0.003, generator_loss=5.388
1/1 [=====] - 0s 17ms/step
epoch 2991 - batch 4/10, discriminator_loss=0.001, generator_loss=5.815
1/1 [=====] - 0s 25ms/step
epoch 2991 - batch 5/10, discriminator_loss=0.002, generator_loss=5.786
1/1 [=====] - 0s 23ms/step
epoch 2991 - batch 6/10, discriminator_loss=0.001, generator_loss=5.882
1/1 [=====] - 0s 23ms/step
epoch 2991 - batch 7/10, discriminator_loss=0.458, generator_loss=5.255
1/1 [=====] - 0s 22ms/step
epoch 2991 - batch 8/10, discriminator_loss=0.002, generator_loss=4.603
1/1 [=====] - 0s 22ms/step
epoch 2991 - batch 9/10, discriminator_loss=0.004, generator_loss=4.385
1/1 [=====] - 0s 25ms/step
epoch 2991 - batch 10/10, discriminator_loss=0.004, generator_loss=4.130
1/1 [=====] - 0s 24ms/step
epoch 2992 - batch 1/10, discriminator_loss=0.003, generator_loss=4.004
1/1 [=====] - 0s 23ms/step
epoch 2992 - batch 2/10, discriminator_loss=0.007, generator_loss=3.672
1/1 [=====] - 0s 25ms/step
epoch 2992 - batch 3/10, discriminator_loss=0.004, generator_loss=3.547
1/1 [=====] - 0s 18ms/step
epoch 2992 - batch 4/10, discriminator_loss=0.003, generator_loss=3.270
1/1 [=====] - 0s 26ms/step
epoch 2992 - batch 5/10, discriminator_loss=0.007, generator_loss=3.262
1/1 [=====] - 0s 18ms/step
epoch 2992 - batch 6/10, discriminator_loss=0.004, generator_loss=3.082
1/1 [=====] - 0s 16ms/step
epoch 2992 - batch 7/10, discriminator_loss=0.011, generator_loss=3.219
1/1 [=====] - 0s 16ms/step
epoch 2992 - batch 8/10, discriminator_loss=0.008, generator_loss=3.182
1/1 [=====] - 0s 20ms/step
epoch 2992 - batch 9/10, discriminator_loss=0.346, generator_loss=4.220
1/1 [=====] - 0s 16ms/step
epoch 2992 - batch 10/10, discriminator_loss=0.002, generator_loss=3.789
1/1 [=====] - 0s 17ms/step
epoch 2993 - batch 1/10, discriminator_loss=0.001, generator_loss=4.023
1/1 [=====] - 0s 20ms/step
epoch 2993 - batch 2/10, discriminator_loss=0.003, generator_loss=3.541
1/1 [=====] - 0s 25ms/step
epoch 2993 - batch 3/10, discriminator_loss=0.004, generator_loss=3.493
1/1 [=====] - 0s 17ms/step
epoch 2993 - batch 4/10, discriminator_loss=0.006, generator_loss=3.250
1/1 [=====] - 0s 17ms/step
epoch 2993 - batch 5/10, discriminator_loss=0.006, generator_loss=2.771

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1/1 [=====] - 0s 25ms/step
epoch 2993 - batch 6/10, discriminator_loss=0.004, generator_loss=2.579
1/1 [=====] - 0s 18ms/step
epoch 2993 - batch 7/10, discriminator_loss=0.004, generator_loss=2.613
1/1 [=====] - 0s 22ms/step
epoch 2993 - batch 8/10, discriminator_loss=0.006, generator_loss=2.645
1/1 [=====] - 0s 17ms/step
epoch 2993 - batch 9/10, discriminator_loss=0.003, generator_loss=2.574
1/1 [=====] - 0s 25ms/step
epoch 2993 - batch 10/10, discriminator_loss=0.005, generator_loss=2.687
1/1 [=====] - 0s 23ms/step
epoch 2994 - batch 1/10, discriminator_loss=0.008, generator_loss=2.642
1/1 [=====] - 0s 21ms/step
epoch 2994 - batch 2/10, discriminator_loss=0.009, generator_loss=2.667
1/1 [=====] - 0s 23ms/step
epoch 2994 - batch 3/10, discriminator_loss=0.003, generator_loss=2.733
1/1 [=====] - 0s 23ms/step
epoch 2994 - batch 4/10, discriminator_loss=0.008, generator_loss=2.833
1/1 [=====] - 0s 31ms/step
epoch 2994 - batch 5/10, discriminator_loss=0.011, generator_loss=3.033
1/1 [=====] - 0s 25ms/step
epoch 2994 - batch 6/10, discriminator_loss=0.008, generator_loss=3.098
1/1 [=====] - 0s 19ms/step
epoch 2994 - batch 7/10, discriminator_loss=0.004, generator_loss=3.424
1/1 [=====] - 0s 23ms/step
epoch 2994 - batch 8/10, discriminator_loss=0.005, generator_loss=3.275
1/1 [=====] - 0s 23ms/step
epoch 2994 - batch 9/10, discriminator_loss=0.003, generator_loss=3.462
1/1 [=====] - 0s 23ms/step
epoch 2994 - batch 10/10, discriminator_loss=0.006, generator_loss=3.391
1/1 [=====] - 0s 19ms/step
epoch 2995 - batch 1/10, discriminator_loss=0.005, generator_loss=3.602
1/1 [=====] - 0s 20ms/step
epoch 2995 - batch 2/10, discriminator_loss=0.002, generator_loss=3.763
1/1 [=====] - 0s 17ms/step
epoch 2995 - batch 3/10, discriminator_loss=0.002, generator_loss=3.773
1/1 [=====] - 0s 17ms/step
epoch 2995 - batch 4/10, discriminator_loss=0.006, generator_loss=4.513
1/1 [=====] - 0s 21ms/step
epoch 2995 - batch 5/10, discriminator_loss=0.616, generator_loss=3.712
1/1 [=====] - 0s 19ms/step
epoch 2995 - batch 6/10, discriminator_loss=0.002, generator_loss=3.799
1/1 [=====] - 0s 25ms/step
epoch 2995 - batch 7/10, discriminator_loss=0.007, generator_loss=3.496
1/1 [=====] - 0s 31ms/step
epoch 2995 - batch 8/10, discriminator_loss=0.005, generator_loss=3.222
1/1 [=====] - 0s 23ms/step
epoch 2995 - batch 9/10, discriminator_loss=0.006, generator_loss=3.100

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1/1 [=====] - 0s 28ms/step
epoch 2995 - batch 10/10, discriminator_loss=0.007, generator_loss=3.214
1/1 [=====] - 0s 21ms/step
epoch 2996 - batch 1/10, discriminator_loss=0.004, generator_loss=3.463
1/1 [=====] - 0s 26ms/step
epoch 2996 - batch 2/10, discriminator_loss=0.003, generator_loss=3.438
1/1 [=====] - 0s 22ms/step
epoch 2996 - batch 3/10, discriminator_loss=0.003, generator_loss=3.356
1/1 [=====] - 0s 25ms/step
epoch 2996 - batch 4/10, discriminator_loss=0.008, generator_loss=3.408
1/1 [=====] - 0s 17ms/step
epoch 2996 - batch 5/10, discriminator_loss=0.006, generator_loss=3.109
1/1 [=====] - 0s 17ms/step
epoch 2996 - batch 6/10, discriminator_loss=0.006, generator_loss=3.166
1/1 [=====] - 0s 21ms/step
epoch 2996 - batch 7/10, discriminator_loss=0.006, generator_loss=3.455
1/1 [=====] - 0s 23ms/step
epoch 2996 - batch 8/10, discriminator_loss=0.005, generator_loss=3.497
1/1 [=====] - 0s 19ms/step
epoch 2996 - batch 9/10, discriminator_loss=0.006, generator_loss=3.543
1/1 [=====] - 0s 29ms/step
epoch 2996 - batch 10/10, discriminator_loss=0.004, generator_loss=3.865
1/1 [=====] - 0s 22ms/step
epoch 2997 - batch 1/10, discriminator_loss=0.016, generator_loss=3.788
1/1 [=====] - 0s 22ms/step
epoch 2997 - batch 2/10, discriminator_loss=0.008, generator_loss=3.928
1/1 [=====] - 0s 18ms/step
epoch 2997 - batch 3/10, discriminator_loss=0.006, generator_loss=4.119
1/1 [=====] - 0s 20ms/step
epoch 2997 - batch 4/10, discriminator_loss=0.003, generator_loss=4.332
1/1 [=====] - 0s 18ms/step
epoch 2997 - batch 5/10, discriminator_loss=0.009, generator_loss=4.679
1/1 [=====] - 0s 24ms/step
epoch 2997 - batch 6/10, discriminator_loss=0.004, generator_loss=4.643
1/1 [=====] - 0s 24ms/step
epoch 2997 - batch 7/10, discriminator_loss=0.004, generator_loss=5.162
1/1 [=====] - 0s 19ms/step
epoch 2997 - batch 8/10, discriminator_loss=0.003, generator_loss=5.158
1/1 [=====] - 0s 22ms/step
epoch 2997 - batch 9/10, discriminator_loss=0.403, generator_loss=5.178
1/1 [=====] - 0s 21ms/step
epoch 2997 - batch 10/10, discriminator_loss=0.001, generator_loss=4.843
1/1 [=====] - 0s 22ms/step
epoch 2998 - batch 1/10, discriminator_loss=0.005, generator_loss=4.454
1/1 [=====] - 0s 24ms/step
epoch 2998 - batch 2/10, discriminator_loss=0.003, generator_loss=4.324
1/1 [=====] - 0s 16ms/step
epoch 2998 - batch 3/10, discriminator_loss=0.002, generator_loss=4.159

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1/1 [=====] - 0s 17ms/step
epoch 2998 - batch 4/10, discriminator_loss=0.003, generator_loss=4.062
1/1 [=====] - 0s 16ms/step
epoch 2998 - batch 5/10, discriminator_loss=0.014, generator_loss=3.905
1/1 [=====] - 0s 17ms/step
epoch 2998 - batch 6/10, discriminator_loss=0.005, generator_loss=4.224
1/1 [=====] - 0s 18ms/step
epoch 2998 - batch 7/10, discriminator_loss=0.005, generator_loss=3.884
1/1 [=====] - 0s 16ms/step
epoch 2998 - batch 8/10, discriminator_loss=0.003, generator_loss=3.919
1/1 [=====] - 0s 19ms/step
epoch 2998 - batch 9/10, discriminator_loss=0.003, generator_loss=4.246
1/1 [=====] - 0s 16ms/step
epoch 2998 - batch 10/10, discriminator_loss=0.004, generator_loss=4.055
1/1 [=====] - 0s 23ms/step
epoch 2999 - batch 1/10, discriminator_loss=0.007, generator_loss=4.045
1/1 [=====] - 0s 31ms/step
epoch 2999 - batch 2/10, discriminator_loss=0.004, generator_loss=4.099
1/1 [=====] - 0s 24ms/step
epoch 2999 - batch 3/10, discriminator_loss=0.005, generator_loss=4.276
1/1 [=====] - 0s 22ms/step
epoch 2999 - batch 4/10, discriminator_loss=0.006, generator_loss=4.410
1/1 [=====] - 0s 28ms/step
epoch 2999 - batch 5/10, discriminator_loss=0.004, generator_loss=4.433
1/1 [=====] - 0s 18ms/step
epoch 2999 - batch 6/10, discriminator_loss=0.004, generator_loss=4.611
1/1 [=====] - 0s 16ms/step
epoch 2999 - batch 7/10, discriminator_loss=0.006, generator_loss=4.733
1/1 [=====] - 0s 19ms/step
epoch 2999 - batch 8/10, discriminator_loss=0.002, generator_loss=4.786
1/1 [=====] - 0s 18ms/step
epoch 2999 - batch 9/10, discriminator_loss=0.004, generator_loss=4.845
1/1 [=====] - 0s 16ms/step
epoch 2999 - batch 10/10, discriminator_loss=0.003, generator_loss=5.339
1/1 [=====] - 0s 17ms/step
epoch 3000 - batch 1/10, discriminator_loss=0.002, generator_loss=5.218
1/1 [=====] - 0s 24ms/step
epoch 3000 - batch 2/10, discriminator_loss=0.002, generator_loss=5.202
1/1 [=====] - 0s 25ms/step
epoch 3000 - batch 3/10, discriminator_loss=0.001, generator_loss=5.413
1/1 [=====] - 0s 28ms/step
epoch 3000 - batch 4/10, discriminator_loss=0.003, generator_loss=5.631
1/1 [=====] - 0s 16ms/step
epoch 3000 - batch 5/10, discriminator_loss=0.002, generator_loss=5.531
1/1 [=====] - 0s 18ms/step
epoch 3000 - batch 6/10, discriminator_loss=0.003, generator_loss=5.843
1/1 [=====] - 0s 20ms/step
epoch 3000 - batch 7/10, discriminator_loss=0.000, generator_loss=6.339

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1/1 [=====] - 0s 21ms/step
epoch 3000 - batch 8/10, discriminator_loss=0.669, generator_loss=5.882
1/1 [=====] - 0s 18ms/step
epoch 3000 - batch 9/10, discriminator_loss=0.002, generator_loss=5.446
1/1 [=====] - 0s 30ms/step
epoch 3000 - batch 10/10, discriminator_loss=0.001, generator_loss=5.166
```

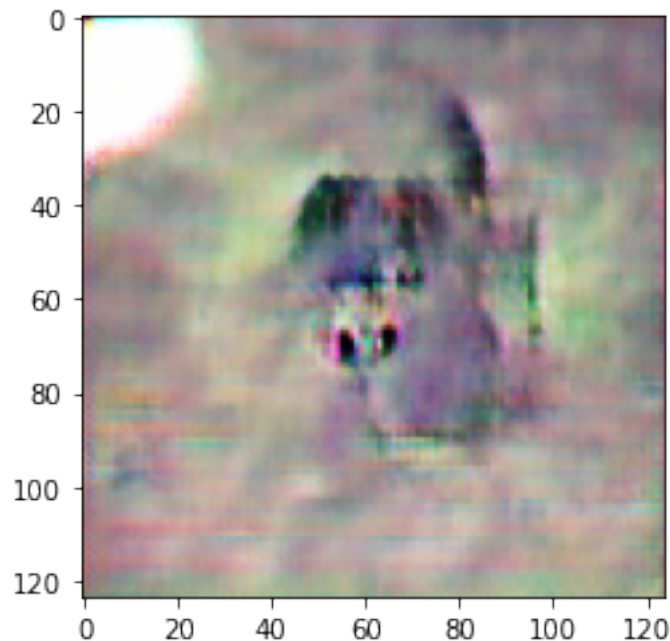
```
[ ]: #model = load_model('modeleFoxAmelioreIDG.h5')
```

```
[ ]: # Création d'un vecteur aléatoire de taille latent_dim
latent_points = generate_latent_points(100, 1)
```

```
[ ]: latent_points = generate_latent_points(100, 1)
generated_image = generator_model.predict(latent_points)
print(generated_image.shape)
plt.imshow(generated_image[0, :, :])
```

```
1/1 [=====] - 0s 27ms/step
(1, 124, 124, 3)
```

```
[ ]: <matplotlib.image.AxesImage at 0x7f426f6fe940>
```



```
[ ]: plt.imshow(generated_image[0, :, :, 0], cmap=plt.cm.binary)
```

```
[ ]: <matplotlib.image.AxesImage at 0x7f426f6585b0>
```



