Coding Python

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```
1 import numpy as np
 2 import tensorflow as tf
 3 from tensorflow.keras import layers, models
 4 import matplotlib.pyplot as plt
 8 num_classes = 3
 9 \text{ image\_size} = 64
 2 def generate_fake_data(num_samples):
       X = np.random.rand(num_samples, image_size, image_size, 3)
       y = np.random.randint(0, num_classes, num_samples)
       y = tf.keras.utils.to_categorical(y, num_classes)
 8 X_train, y_train = generate_fake_data(100)
 9 X_test, y_test = generate_fake_data(20)
22 model = models.Sequential([
       layers.Conv2D(16, (3, 3), activation='relu', input_shape=(image_size,
       image_size, 3)),
       layers.MaxPooling2D((2, 2)),
       layers.Conv2D(32, (3, 3), activation='relu'),
       layers.MaxPooling2D((2, 2)),
       layers.Flatten(),
       layers.Dense(64, activation='relu'),
       layers.Dense(num_classes, activation='softmax')
31 ])
33 model.compile(optimizer='adam',
                 loss='categorical_crossentropy',
                 metrics=['accuracy'])
38 model.fit(X_train, y_train, epochs=5, batch_size=10, validation_data=(X_test,
39 | y_test))
42 loss, acc = model.evaluate(X_test, y_test)
43 print(f"\nTest Accuracy: {acc:.2f}")
```

Compile Result

```
Traceback (most recent call last):
File "/data/user/0/com.kvassyu.coding.py/fi
les/default.py", line 1, in <module>
    import numpy as np
ModuleNotFoundError: No module named 'numpy'
[Process completed (code 1) - press Enter]
```