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1: from tensorflow import keras
2: from tensorflow.keras import layers, regularizers
3: from keras.layers import Dense, Dropout, Activation, Flatten, BatchNormalization
4: from keras.layers import Conv2D, MaxPooling2D, LeakyReLU
5: def make_model(num_classes, x_train):
6:     model = keras.Sequential()
7:     model.add(Conv2D(16, (3,3), padding='same', input_shape=x_train.shape[1:], activation='relu'))
8:     model.add(Conv2D(16, (3,3), strides=(2,2), padding='same', activation='relu'))
9:     model.add(Conv2D(32, (3,3), padding='same', activation='relu'))
10:    model.add(Conv2D(32, (3,3), strides=(2,2), padding='same', activation='relu'))
11:    model.add(Dropout(0.5))
12:    model.add(Flatten())
13:    model.add(Dense(num_classes, activation='softmax', kernel_regularizer=regularizers.l1(0.0001)))
14:    return model
```