batch\_size = 128

num\_classes = 10

epochs = 100

# the data, shuffled and split between train and test sets

(x\_train, y\_train), (x\_test, y\_test) = cifar10.load\_data()

x\_train = x\_train.reshape(50000, 3072)

x\_test = x\_test.reshape(10000, 3072)

x\_train = x\_train.astype('float32')

x\_test = x\_test.astype('float32')

x\_train /= 255

x\_test /= 255

print(x\_train.shape[0], 'train samples')

print(x\_test.shape[0], 'test samples')

# convert class vectors to binary class matrices

y\_train = keras.utils.to\_categorical(y\_train, num\_classes)

y\_test = keras.utils.to\_categorical(y\_test, num\_classes)

model = Sequential()

model.add(Dense(128, activation='relu', input\_shape=(3072,)))

model.add(Dropout(0.5))

model.add(Dense(num\_classes, activation='softmax'))

**Accuracy : 38 %**