The image label is '9'

**The test accuracy you achieve using your CNN**
 Accuracy on test dataset is `0.987`

**List of five activation functions:**
 Relu, hyperbolic tangent, sigmoid, sign, linear

**What is adam?**
It is an optimization algorithm that it is adaptive estimation of first-order and second-order moments.e.i  Is combining both momentum and rmsprop

**What sparse_categorical_crossentropy?**
 loss function used to indicate how good is the prediction, usually used for multi-class classification tasks and it compares the ground truth distribution to the estimated distribution

**What does "epoch" mean**
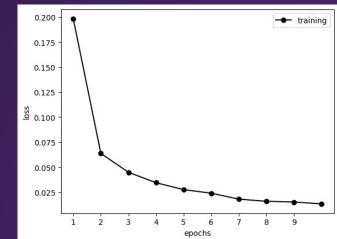 We consider as an epoch  the cycle  where the whole training dataset was used to train the model

```python
model = tf.keras.Sequential()

model.add(tf.keras.layers.Conv2D(8, (3, 3), activation='relu', padding='same', input_shape=(28, 28, 1)))
model.add(tf.keras.layers.MaxPooling2D((2, 2)))

model.add(tf.keras.layers.Conv2D(16, (3, 3), activation='relu', padding='same'))
model.add(tf.keras.layers.MaxPooling2D((2, 2)))

model.add(tf.keras.layers.Conv2D(32, (3, 3), activation='relu', padding='same'))
model.add(tf.keras.layers.Flatten())

model.add(tf.keras.layers.Dense(128, activation='relu'))
model.add(tf.keras.layers.Dropout(0.2))
model.add(tf.keras.layers.Dense(10, activation='softmax'))
model.summary()
```



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