

✔ Congratulations! You passed!

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To pass 80% or
higher

Go to next item

1.

MNIST Adam

model

```
model = Sequential([
    tf.keras.layers.Dense(units=25, activation='sigmoid')
    tf.keras.layers.Dense(units=15, activation='sigmoid')
    tf.keras.layers.Dense(units=10, activation='linear')
])
```

compile

```
model.compile(optimizer=tf.keras.optimizers.Adam(learning_rate=1e-3),
              loss=tf.keras.losses.SparseCategoricalCrossentropy(from_logits=True))
```

fit

```
model.fit(X,Y,epochs=100)
```

$\alpha = 10^{-3} = 0.001$

1 / 1 point

The Adam optimizer is the recommended optimizer for finding the optimal parameters of the model. How do you use the Adam optimizer in TensorFlow?

- ☐ The Adam optimizer works only with Softmax outputs. So if a neural network has a Softmax output layer, TensorFlow will automatically pick the Adam optimizer.
- ☐ The call to model.compile() uses the Adam optimizer by default
- ☐ The call to model.compile() will automatically pick the best optimizer, whether it is gradient descent, Adam or something else. So there's no need to pick an optimizer manually.
- ☒ When calling model.compile, set optimizer=tf.keras.optimizers.Adam(learning_rate=1e-3).

✔ Correct
Correct. Set the optimizer to Adam.

2.

