

### 1. Pertanyaan #1

What is the correct syntax for the first layer in a convolutional neural network that takes an MNIST (28x28 monochrome) input?



```
1 model.add(tf.layers.conv2d({inputShape: [28, 28, 1], kernelSize: 3, filters: 8, activation: 'relu'}));
```

### 2. Pertanyaan #2

What is the correct syntax for adding a maxPooling2D layer to a Convolutional neural network in JavaScript?



```
1 model.add(tf.layers.maxPooling2d({poolSize: [2, 2]}));
```

### 3. Pertanyaan #3

What is the correct syntax for compiling a model with an optimizer, loss function and metrics?



```
1 izer: tf.train.adam(), loss: 'categoricalCrossentropy', metrics: ['accuracy']});
```

### 4. Pertanyaan #4

How do you correctly pass a set of validation data called textXs and testYs to the model.fit method in JavaScript?

Use validationData: [testXs, testYs] in the list of parameters sent as the third parameter to model.fit

**Benar**

### 5. Pertanyaan #5

How do you get the built in callbacks visualizer with TensorFlow.js?

Include the tfjs-vis script, set a callback in model.fit, and set it to a const that called show.fitCallbacks() on the tfvis object

### 6. Pertanyaan #6

If you want to see loss, validation loss, accuracy and validation accuracy on each epoch while training, how do you do this?

Create a list containing text values with the names of the analytics you want to capture, i.e. ['loss', 'val\_loss', 'acc', 'val\_acc'] and pass it to fitCallbacks() as a parameter

### **7. Pertanyaan #7**

When using a dataset like MNIST or FashionMNIST, why is it advisable to use a sprite sheet containing all the images?

It prevents excessive multiple HTTP calls to download the data

### **8. Pertanyaan #8**

What is the role of `tf.tidy()` in TensorFlow.js?

When it is executed, it cleans up all intermediate tensors allocated by a function except those returned by the function