**Congratulations! You passed!**
**TO PASS** 80% or higher

Keep Learning

GRADE
100%

**You have new skill scores!**

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# Week 4 Quiz

**LATEST SUBMISSION GRADE**
100%

1. The diagram for traditional programming had Rules and Data In, but what came out? **1 / 1 point**

- (•) Answers
- ( ) Binary
- ( ) Machine Learning
- ( ) Bugs

✓ **Correct**

2. Why does the DNN for Fashion MNIST have 10 output neurons? **1 / 1 point**

- ( ) To make it train 10x faster
- ( ) To make it classify 10x faster
- ( ) Purely Arbitrary
- (•) The dataset has 10 classes

✓ **Correct**

3. What is a Convolution? **1 / 1 point**

- ( ) A technique to make images smaller
- ( ) A technique to make images larger
- (•) A technique to extract features from an image
- ( ) A technique to remove unwanted images

✓ **Correct**

4. Applying Convolutions on top of a DNN will have what impact on training? **1 / 1 point**

- ( ) It will be slower
- ( ) It will be faster
- ( ) There will be no impact
- (•) It depends on many factors. It might make your training faster or slower, and a poorly designed Convolutional layer may even be less efficient than a plain DNN!

✓ **Correct**

5. What method on an ImageGenerator is used to normalize the image? **1 / 1 point**

- ○ normalize
- ○ flatten
- ○ rezize()
- ◉ rescale

✓ **Correct**

6. When using Image Augmentation with the ImageDataGenerator, what happens to your raw image data on-disk. **1 / 1 point**

- ○ A copy will be made, and the copies are augmented
- ○ A copy will be made, and the originals will be augmented
- ◉ Nothing
- ○ The images will be edited on disk, so be sure to have a backup

✓ **Correct**

7. Can you use Image augmentation with Transfer Learning? **1 / 1 point**

- ○ No - because the layers are frozen so they can't be augmented
- ◉ Yes. It's pre-trained layers that are frozen. So you can augment your images as you train the bottom layers of the DNN with them

✓ **Correct**

8. When training for multiple classes what is the Class Mode for Image Augmentation? **1 / 1 point**

- ○ class_mode='multiple'
- ○ class_mode='non_binary'
- ◉ class_mode='categorical'
- ○ class_mode='all'

✓ **Correct**