



✓ **Congratulations! You passed!**

TO PASS 80% or higher

Keep Learning

GRADE
87.50%

Week 4 Quiz

LATEST SUBMISSION GRADE

87.5%

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
- ☐ resize()
- ☒ rescale

✓ Correct

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

0 / 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

✗ Incorrect

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