

# Notebook 1 Quiz Results for Joshua Cartwright Adams

❗ Correct answers are hidden.

Score for this attempt: **5** out of 5

Submitted Sep 6 at 6:37pm

This attempt took 7 minutes.

## Question 1

1 / 1 pts

Inspect the following code and select the best answer below.

```
import cv2
img = cv2.imread("foo.png")
```

If the file "foo.png" does not exist, what is stored in img?

- ☐ Nothing, cv2.imread raises a RuntimeError
- ☐ Nothing, cv2.imread raises an IOError
- ☐ An empty array
- ☒ None

Correct! OpenCV does not raise an error if the file does not exist, which can create unexpected errors elsewhere in your code at runtime.

## Question 2

1 / 1 pts

What is the default color space for color images read using cv2.imread()?

- ☐ RGBA
- ☐ HSV

☐ RGB

☒ BGR

Correct! OpenCV stores the color channels in BGR order by default while most other libraries expect RGB order.

### Question 3

1 / 1 pts

What is the default "dtype" of images read with OpenCV cv2.imread()?

☐ np.float64

☒ np.uint8

Correct! Numpy assigns a default type of "uint8" (0-255) to the elements in the image array.

☐ int

☐ np.double

### Question 4

1 / 1 pts

Consider the following code and select the best answer below.

```
import numpy as np
img = np.zeros((4, 4))
assert(img[0][2] == img[0, 2])
```

What kind of error do you expect when this code is executed?

☒ None of the Above

Correct! Remember that multi-indexing is the preferred syntax for numpy arrays: `img[0, 2]`

- ☐ AssertionError
- ☐ IndexError - too many values for array index
- ☐ SyntaxError - too many values to unpack for array index
- ☐ RuntimeError - cannot access array elements before they are initialized

### Question 5

1 / 1 pts

Consider the following code and select the best answer below.

```
import numpy as np
import cv2
img = np.ones((4, 4))
assert(np.allclose(cv2.multiply(img, 256), np.multiply(img, 256)))
```

What kind of error do you expect when this code is executed?

- ☐ SyntaxError - ambiguous comparison operator for arrays
- ☐ RuntimeError - array value overflow
- ☐ AssertionError
- ☐ ValueError - incompatible array types
- ☒ None of the Above

Correct! The default dtype of arrays is float, so this operation is the same for both operators.

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