

Things to Know (Info) and Errata

Introduction to Computing and Programming in Python, A Multimedia Approach, Second Edition

Chapter 3

Error/Info	Pg 42	On the second line, the author uses “(0, 0) is 15, (1, 0) is 12, and (2, 0) is 13.” This is inaccurate – it should read similar to the first line: “At (0, 0), the value is 15; at (1, 0), the value is 12; and at (2, 0), the value is 13.”
Info	Pg 48	The difference between explore and show is that consecutive calls to explore will open multiple windows (showing changes made to the original picture). Calling show(somePic) consecutively will NOT show changes unless you call repaint(somePic).
Info	Pg 48	When you use writePictureTo(pic, filepath), the picture format matters! If you change just a few pixels and then save as a .jpg, it is likely that the changes will not appear or will be altered. This is because of .jpg’s lossy compression formatting. If you use .png (which uses lossless compression techniques), ANY changes you make are visible in the written file. This only appears to be an issue when you initially run the “changePixel” programs in chapter 3 and then try to write the files. This will also be a problem when writing LINES (single row of pixels) onto pictures.
Info	Pg 49	Rather than guess where the default folder is, the solution is to type <pre>>>>setMediaPath()</pre> and pick the default folder that writePictureTo can then use to save an image: <pre>>>>writePictureTo(myPict, getMediaPath("newPicture.jpg"))</pre> where myPict is the variable used to represent the picture at the prompt and getMediaPath retrieves the default folder path and adds the file name (in this example, “newPicture.jpg”) to save the image with that filename.
Info	Pg 50	Note the objects in figure 3.10. These are the objects on which the different built-in JES functions operate.
Error/Info	Pg 51-52	Section 3.2.1 is not assigned reading but just in case, do not install MediaTools at all. It will not work in our environment. IrfanView is installed on your laptops and has the capability of shrinking large digital .jpg and .gif images easily: File→Save As and move the slider closer to the low end of the scale. (Be careful to save it as a different named file to not lose the original image.)
Error	Pg 52	On line 3 of the second paragraph, the picture is represented as “p” but two lines down, it is represented as “pict” – either choice is correct but they must both be the same for the code to work properly. “pict” is the better choice. Also note that p=makePicture(pickAFile()) needs to be all on one line to work.
Error	Pg 52	Fig 3.13 and 3.14 have the correct image to go along with the paragraphs but the captions for each figure has been reversed incorrectly.
Info	Pg 56	In the top paragraph, the author indicates that any name can be chosen for a variable. However, p is not really a good choice when writing code for both pictures and pixels – choose variable names that are more meaningful and less likely to be misunderstood. Also, contrary to the advice given in the second paragraph, there is no need to

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		save each program in a separate file – see note on page 64 at the top of the page.
Info	Pg 55-60, 69	The text uses the variables red, green, and blue to represent the RGB components of a pixel in many of the programs. A better choice might be redVal, greenVal, and blueVal because red, green, and blue are reserved words to represent those colors and once they are used as variables in the program, they cannot also be used in the same program for those colors.
Info	Pg 56	On the last line above the prompt commands, the author should have used the word “program” instead of “recipe”.
Info	Pg 57	See the Computer Science Idea – this is a key concept, learning to trace your code!
Error	Pg 57	Both images should be at 0,0 not 1,1 for x,y below the word “Zoom” (older versions of JES were 1 indexed).
Error	Pg 63-64	In the last paragraph on page 63 and the top paragraph on page 64 (excluding the Work Tip), change makeSunset to makeSunset2 – there should be 6 of them.
Error	Pg 65	In the reduceBlue function, the line “filename=makePicture(filename)” should be “picture = makePicture(filename)”
Info/Error	Pg 65	The second sentence of the last paragraph contradicts the last two sentences of the Computer Science idea on page 58 which says that “Names created in the Command Area...can be accessed from within functions in the program Area.”
Info	Pg 66	In the discussion in the center of the page about calling decreaseRed(myPicture) at the command prompt, the author talks about how myPicture and picture(inside decreaseRed), while decreaseRed is running, reference the same picture. This is true. Passing a picture into a function is really just passing a “reference” to the location of that picture in memory.
Info	Pg 66	At the bottom of the page, the authors discuss that the second decreaseRed() should be called changeRed(). There are three good reasons for this: the first is that since the second function has two parameters and the first function only has one parameter – different function, different name. The second reason is that there should not be two functions in your file/folder with the same name – JES will always only run the second one it encounters (it is confused by two functions with the same name). Best advice is to always give your functions distinct names, even if you are only adding a number in its name EX: decreaseRed1, decreaseRed2, etc.). Just make names descriptive of what the functions do. The third reason is that the new function can increase or decrease red and the changeRed name is more descriptive.

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Error	Explanation for printNow()	For lesson 8, you are asked to read the explanation of the printNow() function (JES→JES Functions menu at the top → Input/Output→printNow). There is an error in the example in the explanation – the colon,":", is missing from the end of the for loop.
Info	Pg 69	On the first line of section 3.7, the author should have used "fun program" instead of "fun recipe".
Info	Pg 73	In the 6 th line of increaseRed3, int(redComponent * 1.2) in exercise 3.4 forces the calculation to be an integer – it is an example of "casting" a data type. See Appendix A.4 on page 409 for more information.
Error/Info	Pgs 73-74	Exercises 3.4 (increaseRed3), 3.12, 3.13, and 3.15 have used a second line for makeColor – it must all be on the same line in the actual code or the code will not load/run. See the symbol in Program 42 used to show this and the "Making It Work Tip" on page 118 in the text for an explanation – it should have been noted here, too.

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