

CS3388 ASSIGNMENT 1

*Due date: Friday Jan. 24th 2020, at 11:00pm.
Weight: 10% of final mark*

The purpose of this assignment is to complete the Python class `graphicsWindow` found in file `graphicsWindow.py`. You are asked to program a method `drawLine(p1,p2,color)` that draws a line in the image from point `p1` to point `p2` with color `color`. The points `p1` and `p2` are expressed as tuples `(x,y)`. The color is also a tuple of the form `(r,g,b)` where `r,g,b` are values between 0 and 255. The method `drawLine(p1,p2,color)` must:

- implement Bresenham's integer line drawing algorithm correctly, for lines of all slopes
- be properly documented (Header comments: description of parameters, what the method does, and description of output. Code comments: description of non-obvious sections of code)
- The class `graphicsWindow` is available in the Resources Section of OWL, under Python Code
- Do not change file name nor the actual name of the `graphicsWindow` class
- Make sure your method `drawLine(p1,p2,color)` is actually called `drawLine`
- Respect the type and order of the parameters
- Use the [following Python program](#) to test `Drawline(p1,p2,color)`
- The output of the test program should correspond exactly to [this image](#)
- Use OWL to submit the file `graphicsWindow.py` containing your method
`drawLine(p1,p2,color)`

You must use Python 3.7 and PyCharm 2018.2 or above for this assignment. Before submitting your assignment, please refer to the [assignment marking scheme](#) and [submission guidelines](#).