## Exercise #2: Definition of Polygons
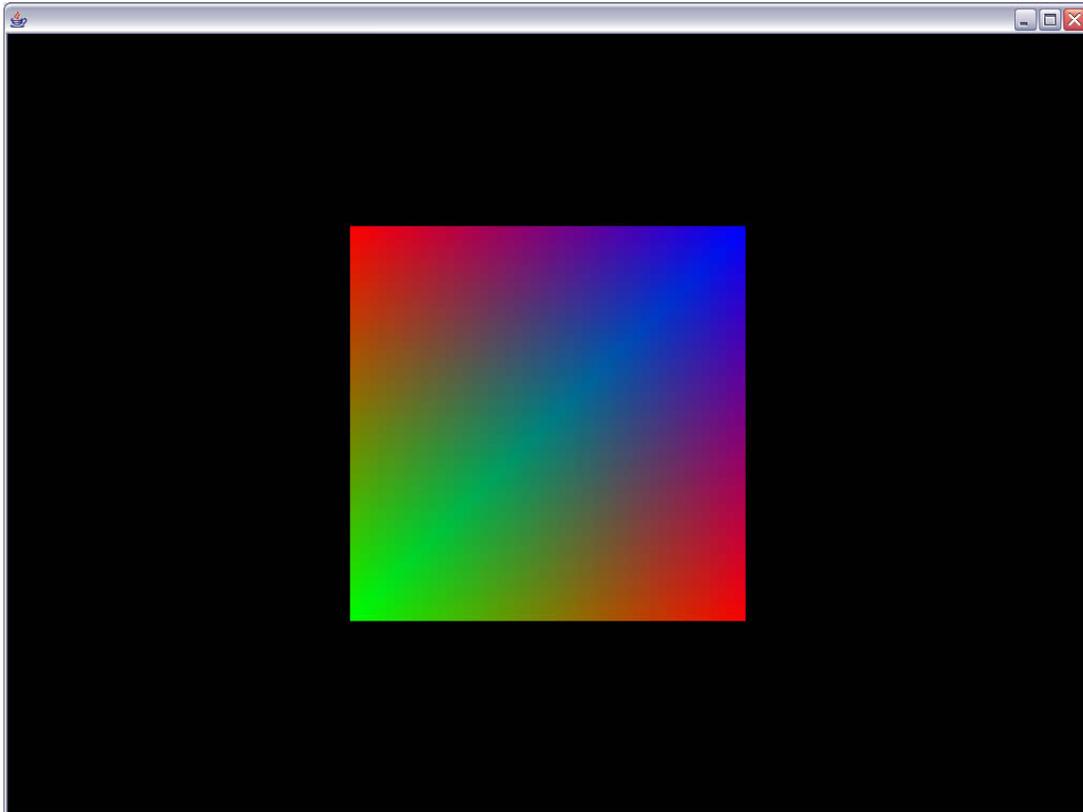
1. Download the *QuadTest.java* and *Quad.java* files. This program is supposed to produce a colorful square in the window, as shown in the figure below. However, it does not work in its current coding. Find out what is wrong with the program, and correct the error(s) to make it work.



2. Make necessary modification to the program so that you can check out the way that `QuadArray` should be used to create rectangles by working within *eclipse*.

   (a) Define the square so that its front faces the viewer.

   (b) Define the square so that its back faces the viewer.

   (c) Define an irregular rectangle whose four sides have different length.

   (d) Define an invalid rectangle, e.g., a bow tie.

   (e) (Optional) Produce multiple rectangles at the same time by increasing the length of the quadarray.

   (f) (Optional) Produce multiple rectangles at the same time with different colors.

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