This is a sample code implemented in Java. The program reads in an image, transforms it from RGB to Y values, and saves it. The input and output images will be displayed on the dialog.

- The entrance of the program lies in the class *convertImg*. Functions *createAndShowGUI* and *creatContentPane* take care of the GUI layout.
- The class *IMGPanel* inherits the class *JPanel* to show images on the interface.
- The classes *ImageFilter* and *Utils* are created to filter files in file open/save dialog.

More information about open/save file can be found here:

http://docs.oracle.com/javase/tutorial/uiswing/components/filechooser.html

More information about image operation can be found here:

http://docs.oracle.com/javase/tutorial/2d/images/index.html