SUMMARY

In this assignment you will add three methods to the Picture class (Picture.java) to frame and panel pictures.

DEADLINE

This assignment is due on Friday, February 28 at 11:00 pm.

DESCRIPTION

FRAME

Create a new method:

```java
public Picture frame(int frameSize, Color frameColor)
```

in Picture.java. This method will create and return a new picture object. The new picture object will contain the original picture inside a frame. The thickness of the frame is given by the parameter frameSize. The color of the frame is given by the parameter frameColor. The new picture object will be larger than the original because of the frame.

PANEL

Create a new method:

```java
public Picture panel(int columns, int rows, Color dividerColor)
```

in Picture.java. This method will create and return a new picture object. The new picture object will be the original picture with vertical and horizontal divider lines drawn on top. The columns parameter will specify the number of column segments that will result. That is, the number of vertical lines to be drawn is one less than the number of columns. e.g. four columns require three divider lines. Likewise for rows. The dividerColor parameter will specify the color of the divider lines. Divider lines should be one pixel thick and be evenly spaced. See the examples for reference.

PANELFRAME

Create a new method:

```java
public Picture panelFrame(int columns, int rows,
                          int frameSize, Color dividerFrameColor)
```

in Picture.java. This method will create and return a new picture object. The new picture object will be the original picture both paneled and framed. The columns and rows parameters determine the paneling columns and rows. The thickness of the frame is given by the parameter frameSize. The dividerFrameColor parameter will serves as both the dividerColor and frameColor.
String fileName = ".../swan.jpg";
Picture original = new Picture(fileName);
original.show();

Color darkBlue = new Color(0, 64, 128);
original.frame(20, darkBlue).show();

Color orange = new Color(255, 127, 0);
original.panel(4, 3, orange).show();

Color darkGreen = new Color(0, 128, 0);
original.panelFrame(3, 2, 10, darkGreen).show();
**SUBMISSION**

Submit the file

    Picture.java

with your method added by the deadline given above. Place all files for submission in a directory in your cs account. Submit the entire directory with the following command:

    submit102 assign1 MY_DIRECTORY

For example, if you named your directory assignment-01, and your current working directory contained the assignment-01 directory, you would submit with the following command:

    submit102 assign1 assignment-01