CompSci 6
Programming Design and Analysis

March 18, 2008
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Announcements

• Read for next time Chap. 9.1-9.3, 14.6, 17.1
• Assignment 6 out today
• Reading Quiz for next time
Two-Dimensional Arrays

```java
int [][] values = new int[20][15];
• Declares an array with 20 rows, 15 cols
• Sum up all the values
int sum = 0;
for (int k=0; k<20; k++)
{
    for (int j=0; j<15; j++)
    {
        sum += values[k][j];
    }
}
```
Pixmap

- Wrapped up our 2-D array into a class
- Pixmap
  - private String myFileName;
  - private BufferedImage myImage;
  - private Dimension mySize;
- Create a pixmap
- Get and Set a color from one pixel
  - public Color getColor(int x, int y)
  - public void setColor(int x, int y, Color value)
Other Pixmap methods

- public String getName()
- public boolean isInBounds(int x, int y)
- public Dimension getSize()
- public void setSize(int width, int height)

- NOTE: Look at code for “Negative” – it’s already been done for you
Classwork - Mirror Vertically and Horizontally

- Mirror vertically
  - Think about writing a swap method

- Mirror horizontally
Classwork - Emboss a Picture
Assignment 6 - Expand

• Example –
  – Expand by 3 rows and 2 columns
Assignment 6 - Blur

• Example – Blur 9 x 9
Assignment 6 – Edge Detection
Extra Credit

• Example – edge detect 5x5