CompSci 6
Programming Design and Analysis

March 21, 2006
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Announcements

• Read for next time Chap. 11.1-11.3, 19.6 21.1
• Assignment 4 out today
• Reading Quiz for next time
Two-Dimensional Arrays

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)
Classwork - Mirror Vertically and Horizontally

• Mirror vertically
  – Think about writing a swap method

• Mirror horizontally
Classwork - Emboss a Picture
Assignment 4 - Expand

• Example –
  – Expand by 3 rows and 2 columns
Assignment 4 - Blur

- Example – Blur 9 x 9
Assignment 4 – Edge Detection

• Example – edge detect 5x5