Step Into Java:
Mirror Part of Your Pix

Mr. Neat
Java

Cosmetic Surgery

- Let's fix an ancient Greek ruin (photographically)

Cosmetic Surgery

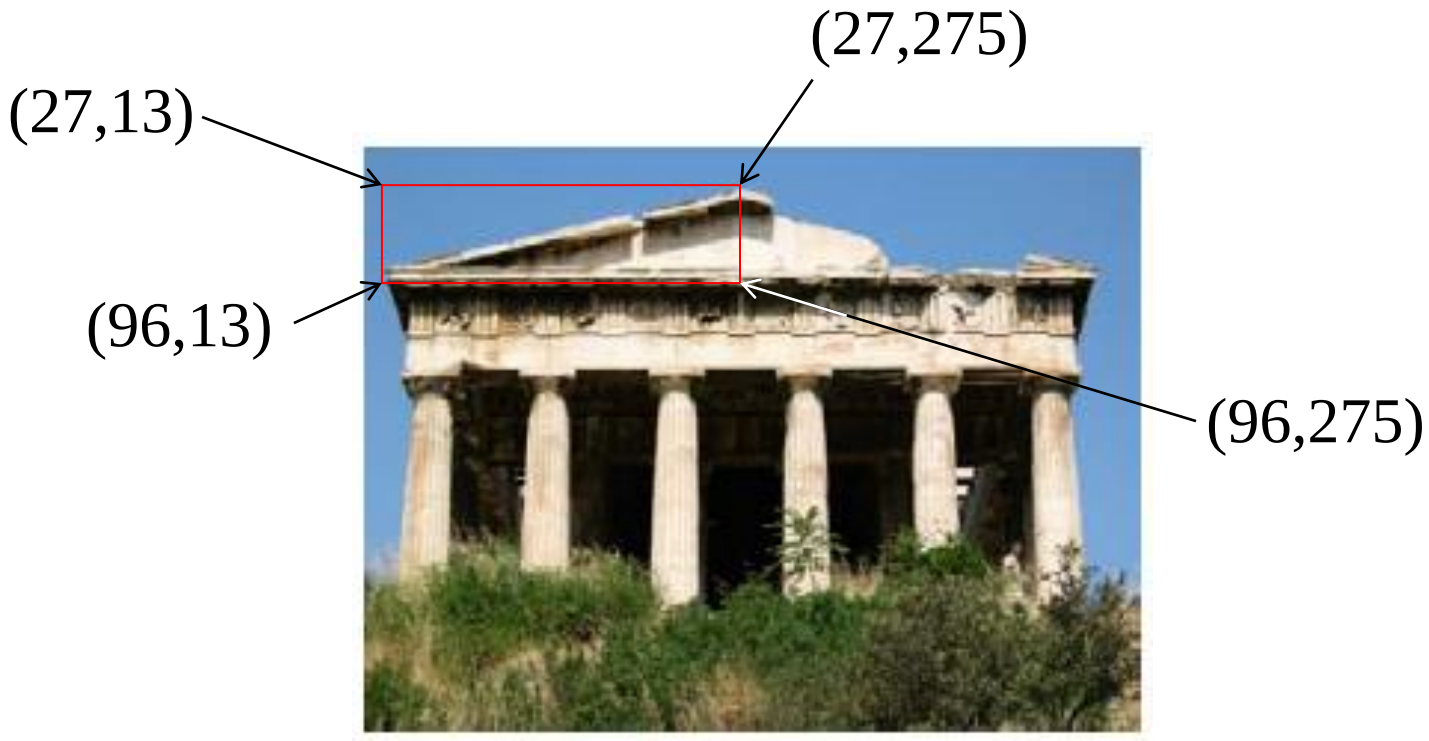
- How?
- Flip horizontal or vertical line?
- Flip left to right or right to left?

Cosmetic Surgery

- How?
- Where is the mirror point?

Cosmetic Surgery

- How?
- What are the dimensions of the sub picture to flip?



Cosmetic Surgery

- How?
- Get the left Pixel
- Get the right Pixel
  - Find left Pixel distance to mirror point
  - Add this distance to mirror point
- Set right Pixel color to left Pixel color

Cosmetic Surgery

Cosmetic Surgery

- Let's look at the code…

```
public void mirrorTemple()
{
  int mirrorPoint = 276;
  Pixel leftPixel = null;
  Pixel rightPixel = null;
  int count = 0;
  Pixel[][] pixels = this.getPixels2D();

  // loop through the rows
  for (int row = 27; row < 97; row++)
  {
    // loop from 13 to just before the mirror point
    for (int col = 13; col < mirrorPoint; col++)
    {

      leftPixel = pixels[row][col];
      rightPixel = pixels[row]
                        [mirrorPoint - col + mirrorPoint];
      rightPixel.setColor(leftPixel.getColor());
    }

   }
 }
```

Cosmetic Surgery

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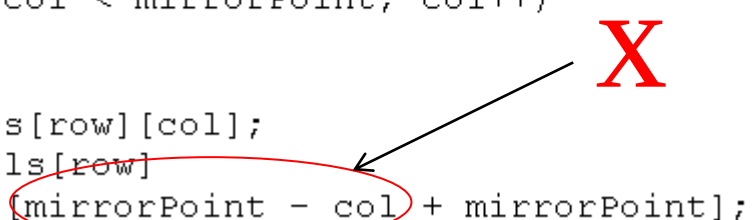

Lab – Mirror Sub Pix

Write the method `mirrorArms` to mirror the arms on the snowman (“`snowman.jpg`”) to make a snowman with 4 arms. Write a class (static) test method in `PictureTester` to test this new method and call it in the `main` method.