## **Homework 1**

Do some basic research on some method of invisible <u>steganography</u>. It can be one of the methods below or <u>something different</u>. Specifically:

- 1. describe how the steganographic method is used, and
- 2. give an example of the method in practice, if it is feasible (you may demonstrate in class).
  - Ancient ad-hoc techniques
  - Invisible ink
  - Microdots
  - Printer steganography

## **Knitting Steganography**

This kind of steganography uses messages hidden in the yarn of clothing to transmit messages securely. The way that it works is through the use of two kinds of stitches: a knit stitch, which is smooth and looks like a "v", and a purl stitch which somewhat resembles a horizontal line or slight bump. These two can be used in conjunction to encode a message in morse code into an article of clothing.

An example of this steganography takes place during World War II. Phyllis Latour Doyle, a secret agent for Britain, snuck information to the British using knitting as cover. According to <a href="mailto:getpocket.com">getpocket.com</a>, "When the German authorities carefully unraveled such a sweater, the story went, they found the wool thread dotted with many knots. [...] an ordinary loop knot can make the equivalent of a dot and a knot in the figure-eight manner will give you the equivalent of a dash."