

Algorithms of Information Security

Exercises for *Steganography*

1. Suppose we have the following 3 pixels of a 24-bit image in the RGB model:

(00101101 00011100 11011100)

(10100110 11000100 00001100)

(11010010 10101101 01100011)

Use the LSB method to insert the message: 200.

Hint: $(200)_2 = 11001000$.

[Result:

(0010110**1** 0001110**1** 11011100)

(1010011**0** 1100010**1** 00001100)

(1101001**0** 1010110**0** 01100011)

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2. Suppose we have the following 2 pixels of a 24-bit image in the RGB model:

(00110111 01010101 01101111)

(00010011 00111010 01011011)

Use the LSB method using the two least significant bits to insert the message: A.

Hint: $(A)_2 = 01000001$ in ASCII.

[Result:

(001101**01** 010101**00** 01101100)

(000100**01** 00111010 01011011)

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