

# Pseudocode

Function steno\_image

Supported image types are png, jpg, bmp, gif

Get secret file name

Get carrier image name

If carrier image type is not supported

Error and exit

Extract raw bytes from secret file

Extract image data from carrier image

If the secret file is too big

Error and exit

Prepend fingerprint to secret file bytes

Encrypt fingerprint/file bytes package

Get big endian integer representation of ciphertext

Prepend length of ciphertext to cipher text

Stuff ciphertext package into LSB of carrier image

Function unsteno\_image

If the carrier image is not PNG or BMP

Error and exit

Extract the image data from carrier image

Extract the secret packet from the LSB of the image data

Grab the length from the first 4 bytes of the packet data

Locate ciphertext using the length

Decrypt the ciphertext

If fingerprint is not found

Error and exit

Remove fingerprint from data

Write the data to file