

# Student CTF

## Summer Term 2013

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### Assignment Sheet 6

#### Information about this sheet:

- Release date: Tuesday, October 29<sup>th</sup>, 2013
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#### Exercise 6: Steganography for Beginners

"Steganography is the art and science of writing hidden messages in such a way that no one, apart from the sender and intended recipient, suspects the existence of the message, a form of security through obscurity." – <https://en.wikipedia.org/wiki/Steganography>

Hiding messages in images is one of the most popular ways to use steganography. The goal of this sheet is to get a basic understanding how we could implement image steganography.

- a) Describe the file format of popular image formats (e.g., jpg, png, bmp).
- b) Describe the different approaches to hide information within image files.
- c) Implement a steganography tool (with Python) to store secret information within a bmp.