# Weekly report 4

Total working hours - 10.

## Tasks completed:

- Encryption main function AES\_encrypt, test case and unit testing.
- Decryption helper functions (AES\_Inv\*), test cases and unit testing.
- Decryption main function AES\_decrypt, test case and unit testing.
- Updated documentation.
- Tinkering to make this build on melkki.

### Progress on the software:

- Now it actually encrypts and decrypts, albeit one block at a time :)
- Compiles and tests on two machines, albeit testing w/ a bootleg fix.

#### Learned:

- This is a complicated algorithm. I would use a library if I needed this in production code.
- Unit testing is the king. Or if not the king, then at least the crown prince. The algorithm producing chaotic results (as expected w/ encryption), even smallest mistakes in single units cause the main functions to fail in spectacular ways.

## Unclear / problems:

• How the lib dependency is really done in gradle? The current one is not perfect, far from it.

## Next:

• Main program.