

Homework 1

1. **(Optional)** If you want to have a look at the code presented in the lectures, install Node.js available (for free) from

<http://nodejs.org>

It needs also the Node-packages: Express, Cookie-Parser, Body-Parser and Crypto.

2. Practice thinking like an attacker. Assume the following situation:

Prof. V. Nasty gives the following final exam question (closed books, closed notes):

Write the first 100 digits of pi:

3.

Think of ways how you can cheat in this exam?

3. Explain what hashes and salts are. Describe how they can be used for ensuring data integrity and storing password information.
4. What are good uses of cookies (that is browser cookies)?
5. Why is making bank customer be liable for financial fraud a bad design choice for CC payments?