**Homework 1**

**Due date: September 17, before the class**

1. Try to explain why the “salt” strategy can used to protect user passwords, even when the salt and password file are publicly available? [50 points]
2. Assume that passwords are limited to the use of the 95 printable ASCII characters and that all passwords are 10 characters in length. Assume a password cracker with an encryption rate of 6.4 million encryptions per second. How long will it take to test exhaustively all possible passwords on a UNIX system? Explain briefly. [30 points]
3. Give 5 examples of strong passwords and test their strengths: [20 points]

https://password.kaspersky.com/