Exercise - Exam Preparation

1. Which Goals of Protection do you know? Describe what they mean!

2. Describe the terms vulnerability, attack, threat and risk.

3. What can be done to avoid using environment variables?

4. What is a Buffer Overflow and how can it be used to exploit a program?

5. Which methods for input validation do you know? Use examples!

6. Which C functions are insecure and what are the secure alternatives?

7. What is randomness and how can you get real random numbers?

8. Which symmetric and asymmetric encryption algorithms were discussed in the lecture? Provide an example for every algorithm with real numbers!

9. How can you store a password in a secure way?