Week 2

1. Read the documentation (15 minutes).

2. Answer the following questions: (10 minutes)

    A. What is a microprocessor?

    B. What is a register?

    C. Which are the x86 16 bit registers?

    D. Which are the x86 32 bit registers?

    E. Which are the general registers?

    F. Which are the special registers?

    G. What are the flags? Give some examples.

    H. Which is the role of segment registers?

    I. How is the memory organized in real mode? How is the physical address calculated?

    J. How is the memory organized in protected mode? How is the physical address calculated?

3. Discussions about Intel x86 architecture.

4. How is an instruction executed by the microprocessor? What are the stages of execution?

5. Exercises with the OllyDebugger tool.