

Lab Time: Friday 16:00 ~ 17:50

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QUESTIONS

- 1. What are some differences between the debugging mode and run mode of the AVR simulator? What do you think are some benefits of each mode?
 - (1) Debugging mode allows line-by-line simulation, and run mode continuously runs the program.
 - (2) The benefit of debugging mode is that it is simple to find where the error happened, and the benefit of run mode is that it can keep observe how the program works.
- 2. What are breakpoints, and why are they useful when you are simulating your code?
 - (1) Breakpoints are the points which halt line-by-line simulation.
 - (2) Breakpoints are useful because they can save time and frustration in the process of programming.
- 3. Explain what the I/O View and Processor windows are used for. Can you provide input to the simulation via these windows?
 - (1) I/O View and Processor windows are used for indicating problems in line-by-line simulation.
 - (2) No, you can't.
- 4. The ATmega128 microcontroller features three different types of memory: data memory, program memory, and EEPROM. Which of these memory types can you access by using the Memory window of the simulator? (e)
 - (a) Data memory only
 - (b) Program memory only
 - (c) Data and program memory
 - (d) EEPROM only
 - (e) All three types (V)

REFERENCE

Atmel studio and ATmega 128 A Beginner's Guide