CS 271 Computer Architecture and Assembly Language

Self-Check for Lecture#6

Solutions

1. What is the purpose of a breakpoint during a program debugging session?
   It pauses execution, so the programmer can view the contents of memory, registers, etc.

2. Which function key is used to execute a library procedure, without going into the details of the procedure?
   F 10

3. When execution is paused at a breakpoint, which function key is used to continue execution to the next breakpoint (or to the end of the program if no more breakpoints exist)?
   F 11

4. The MASM assembler is used for locating syntax errors, but the debugging system is used for locating logic, run-time, or execution errors.

5. Convert decimal 2345
   a. binary 0000 1001 0010 1001
   b. hexadecimal 0x0929

6. Convert decimal -2345
   a. 16-bit binary 1111 0110 1101 0111
   b. 4-digit hexadecimal 0xF6D7

7. Convert 0x1CE9
   a. binary 0001 1100 1110 1001
   b. decimal 7401

8. Convert signed integer 0xACE9
   a. binary 1010 1100 1110 1001
   b. decimal -21271
9. Convert unsigned integer 0xA8E9
   
a. binary 1010 1100 1110 1001
   
b. decimal 44265

10. Use an ASCII character table and the following MASM data segment declaration:
    .data
course BYTE "MASM 271", 0

    What values would be stored in the memory bytes starting at course? Show your answers in hexadecimal.
    
    0x4D 0x41 0x53 0x4D 0x20 0x32 0x37 0x31 0x00