

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 ~~0x~~ACE9

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