Homework2

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- 题目 1
  - Assume we have an integer type of 8 bits, fill in the table below.

Value	Two's complement
37	
-15	
	01010101
	10101010

Homework2

- 题目 2
  - Consider the following C expressions:
    - short s = -3;
    - unsigned short us = s;
    - int i = -52;
    - unsigned int ui = i;
  - Assume we are running code on 8-bit machine using two’s complement for singed integers. Also assume that right shift of signed values are performed arithmetically. A “short” integer is encoded 4 bits. Fill in the table below.

Homework2

- 题目 2

Expression	Binary Representation
us	
ui	
us << 1	
i >> 2	
ui >> 2	
(short) i	
(int) s	

Homework2

- 题目 3
  - Write a function with the following prototype:
  - / * Determine whether arguments can be added without overflow
  - * This function should return 0 if arguments x and y can be added without causing overflow
  - */
  - int uadd_ok(unsigned x, unsigned y);