

# Homework1

# Homework1

- 题目 1

Fill in the table below

Binary	Octal	Decimal	Hexadecimal
101 0101 0110			
	777		
			0x1c5
		2015	
	2015		

# Homework1

- 题目 2

- Given A and B with hexadecimal expression 0x7F and 0xBA respectively. Calculate the values of the following expressions.
  - a)  $A \& B$
  - b)  $A | B$
  - c)  $A \wedge B$
  - d)  $\sim A | \sim B$
  - e)  $A \& \& B$
  - f)  $A || B$

# Homework1

- 题目 3

- Design C expressions using bitwise (& | ~ ^) and logical (&& || !) operators, which return 1 under the specific conditions described below, otherwise return 0.
  - a) all bits of x are 1.
  - b) all bits of x are 0.
  - c) bits of x' s least significant byte are 1.
  - d) bits of x' s least significant byte are 0.

# Homework1

- 题目 4

- Design a C expression, which generates a word (32-bit) consisting of the lower 16 bits of x and the remaining bits of y.
- For example, x = 0x89ABCDEF and y = 0x76543210, it will generate 0x7654CDEF