Homework 1

Shell

Create an executable file, named "echo.sh", with one sequence of commands to print *the full pathname of the current working directory* on screen. Descript what you have to do for this target. (Hint: pwd)

Number Conversion

Fill in the table below

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

Operations

Note：You need to read the Chapter 2.1.9 of the book CSAPP before doing the below homework.

1) 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 ^ B
   d) ~A | ~B
   e) A && B
   f) A || B

2) 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.

3) 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