1) Write a program that takes an integer from the user and converts it into its proper binary and hexadecimal representation using a LIFO structure.

Precondition: The decimal numbers will be integers and positive.

Binary

	2^3	2^2	2^1	2^0
	8	4	2	1
10	1	0	1	0

10 mod 2 =0, 10/2=5
5 mod 2 =1, 5/2=2
2 mod 2=0, 2/2=1
1 mod 2 =1, 1 /2=0

Hexadecimal

Note that in the hexadecimal number system, the numbers are in the following sequence
0 1 2 3 4 5 6 7 8 9 A B C D E F
The decimal equivalent is
0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

To convert the decimal number 65 into its hexadecimal equivalent:

	16^3	16^2	16^1	16^0
	4096	256	16	1
65			4	1

65 mod 16=1 65/16=4
4 mod 16=4 4/16=0