HW1

1. Convert the following numbers from the given base to other three bases listed in the table:

Decimal	Binary	Octal	Hexadecimal
316.1	?	?	?
?	10101011.01	?	?
?	?	27.53	?
?	?	?	ED06

2. Convert the hexadecimal number 9BF2 directly to binary number, and then convert it from binary to octal directly.

3. Encoding Rules. Equations (1.3) and (1.4) are examples of *decoding* rules that return the value represented by a multi-bit digital signal. Write down the corresponding *encoding* rules. These rules give the value of each bit of the digital signal as a function of the value being encoded.

4. Write the expression "Tsing-Hua" in ASCII using an eight-bit code including the space. Treat the leftmost bit of each character as a parity bit. Each 8-bit code should have even parity.

5. Find the Gray code with 10 code numbers.