

这是一个RSA公钥密码系统的简单实现：

p: 10101100100111  
q: 11110110111011  
n: 1010011001111101000001111101  
phi: 1010011001110110011110011100  
e: 0111000111011100001000001111  
d: 0100100100101000011010011111

明文：

Mathematical Fundation of Information security 201904051  
517021911065

数字化：

10011011100001111010011010001100101110110111000011110100110100111000  
11110000111011000100000100011011101011101110110010011000011110100110  
1001110111111011100100000110111110011001000001001001110111011001101  
1011111110010110110111000011110100110100111011111011100100000111001  
11100101110001111101011110010110100111101001111001010000001100100110  
00001100010111001011000001101000110000011010101100010100000011010101  
10001011011101100000110010011000101110010110001011000101100000110110  
0110101

加密：

10001001100010110100000111010000100000011001101001111100001000011000  
00100101001010010011011001111010101100011101100000101100000111010011  
01101001100001110010010011100011000010000001100110100111110000100001  
10000010010100101001100101000010110101110010011101000111100001111101  
000111010000100000011001101001111100001100001111110100110001101010  
00001011010000110000010101100010011010000110010100100111111100111011  
00011010011110001000111111001101010010100000111100011010101110011110  
00001000000110011010011111000010000110000010010100101001100101000010  
11010111001001110000001010011101010111100100100010001111110011010100  
10101010000010110100001100000101000000101001110101011110010000000000  
10110000111101101111101000001011010000110000010100001001101101101101  
00001111100010001111110011010100101000000000101100001111011011110000  
00101001110101011110010000110101000001110000111011001001100001110010  
01001110001100001000000110011010011111000010000110000010010100101001  
10010100001011010111001001110000001010011101010111100100100010001111  
11001101010010101010000010110100001100000101000000100011100001001100  
1111100000101100000111010011011001000111100001111010001110101111111  
00111011000110100111001101010000011100001110110010010100001011010111  
00100111001000011000001001010010100101010100011100101011110011001010  
0000101101000011000001011000101111000010111110001010101010010110111  
11000011110000111001010111000010110101100111100101111111101011110101  
01010100101101111100001111000010111001010001010011011110010101001011  
01111100001111000011100110011011100110001010001110010101110000101101  
01101010000010110100001100000101001110011001101110011000101000111001  
0101110000101101011001101010000000001111111101001010100101101111100  
00111100100010111100001011111100010100111001010111000010110101100111  
10010111111110101111010100111001010111000010110101100011100101011100  
00101101011001010100101101111100001111000110110010010001011100110111  
0011100110011011100110001010

解密：

10011011100001111010011010001100101110110111000011110100110100111000  
11110000111011000100000100011011101011101110110010011000011110100110

10011101111110111001000001101111110011001000001001001110111011001101  
1011111110010110110111000011110100110100111011111011100100000111001  
11100101110001111101011110010110100111101001111001010000001100100110  
00001100010111001011000001101000110000011010101100010100000011010101  
10001011011101100000110010011000101110010110001011000101100000110110  
0110101

原文：

Mathematical Fundation of Information security 201904051  
517021911065

请输入您想加密的内容：

The lessons of Mathematical Fundation of Information Security is  
very interesting. I can learn a lot from the course and I enjoy it  
very much.

p: 10011010000001

q: 11010001000101

n: 0111110111001001010011000101

phi: 0111110111000011101000000000

e: 0100101101010111010011011111

d: 0010100111000111110100011111

明文：

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数字化：

1010100110100011001010100000110110011001011110011110011110111111011  
10111001101000001101111110011001000001001101110000111101001101000110  
01011101101110000111101001101001110001111000011101100010000010001101  
1101011101110110010011000011110100110100111011111011100100000110111  
1110011001000001001001110111011001101101111110010110110111000011110  
10011010011101111110111001000001010011110010111000111110101111001011  
01001111010011110010100000110100111100110100000111011011001011110010  
11110010100000110100111011101110100110010111100101100101111001111101  
00110100111011101100111010111001000001001001010000011000111100001110  
11100100000110110011001011100001111001011011100100000110000101000001  
1011001101111111010001000001100110111001011011111011010100000111010  
0110100011001010100000110001111011111101011110010111001111001010100  
00011000011101110110010001000001001001010000011001011101110110101011  
01111111100101000001101001111010001000001110110110010111100101111001  
010000011011011110101110001111010000101110

加密：

01011001010110010000011110110110000111011011000000001000001001010000  
01011010101100100000000001010100000011110100001101111101000010011001  
11110010010100000101101010110010010011100000011101000000010101001110  
00000111010000000101010101100101010011101001110101011110010111111000  
1010110001001110000001110100000001010000000001010100000011101000101  
01100101010011101001110101111000010100111011011101010000000001010100  
000011110100001010111001001001101110110101110000110001111110011  
01101011110111001011011110010110000111011011000000001000001001010000  
01011010101100100111010010101110100111110011011101011100001100011111  
00110110101111011100101101111001011010111011010010010001000010001001  
11010000100100101011011101011100001100011111001100110111110100001001  
10011111000000000101010000001111010001100011001001111100111000100111

101100110101111110101100101111001011111000101011000000011011001001  
100100101010011101011100001100011111001011010111011100101101111001  
011010111011010010010010000101011001010100111010011101010111100101  
11111000101011000000000001010100000011110100010101100101010011101001  
11010111100001010011101101110101000000000101010000001111010001010100  
110100111111100001001011110010111110001010110001111000010100111011  
0111010101010110010101001110100111010101100101101111100110101101011  
01001010111010011111001101110101110000110001111100110110101111011100  
10110111100101101011101101001001001000010101011001010100111010011101  
01011110010111111000101011000000000001010100000011110100011001110000  
11010111000100110010010100000101101010110010000010011101000010010010  
1011011110110011010111111010110010110010110111110011010110101101011  
10110100100100100001011010111101110010110111100100110101011100110100  
00001011000000000101010000001111010001101011101101001001001000010100  
11100000011101000000010100000000010101000000111101000001011101010000  
00000010111000100101000001011010101100100101100101101111100110101101  
00110101011100110100000010110000000001010100000011110100011010111011  
01001001001000010101111001011111100010101100011010111101110010110111  
1001001001010000010110101110010010110010110111110011010110100100101  
00000101101010110010010011100000011101000000010101101011110111001011  
0111100101101011101101001001001000010101111001011111000101011000110  
11101011000000110101110100111010001011100000101001000000000001010100  
0000111101000101010011010011111110000100000000001010100000011110100  
00001001110100001001001010110111010111000011000111110011010111100101  
11111000101011000000000001010100000011110100001101111101000010011001  
11110010010100000101101010110010011101011100001100011111001101011001  
01101111100110101101010111100101111110001010110000000000010101000000  
11110100011101011100001100011111001100000000010101000000111101000011  
01111101000010011001111101010110010101001110100111010110101111011100  
10110111100100000000010101000000111101000111100001010011101101110101  
010110010110111110011010110101011001010100111010011101011101001010  
11101001111100110000000001010100000011110100011010111101110010110111  
10010110000111011011000000001000001001010000010110101011001000000000  
01010100000011110100000010011101000010010010101101010110010101001110  
10011101011110110011010111111101011001011001011011111001101011010100  
11100000011101000000010100100101000001011010101100100000000001010100  
00001111010001110101110000110001111100110101111001011111100010101100  
00000110110010011001001010100000000001010100000011110100010101001101  
00111111110000100000000001010100000011110100001001010000010110101011  
00100101111001011111100010101100000001101011110101011110101001010110  
01010100111010011101001101010111001101000000101100000000010101000000  
11110100011010111011010010010010000101101011110111001011011110010000  
00000101010000001111010000010111010100000000001011100010010100000101  
10101011001001011001011011111001101011010011010101110011010000001011  
00000000010101000000111101000111010010101110100111110011011110110011  
010111111101011000001001110100001001001010110111000011101101100000000  
100000111010001011110000010100100

解密：

10101001101000110010101000001101100110010111100111110011110111111011  
1011100110100000110111110011001000001001101110000111101001101000110  
01011101101110000111101001101001110001111000011101100010000010001101  
11010111011101100100110000111101001101001110111111011100100000110111  
1110011001000001001001110111011001101101111110010110111000011110

10011010011101111110111001000001010011110010111000111110101111001011  
01001111010011110010100000110100111100110100000111011011001011110010  
11110010100000110100111011101110100110010111100101100101111001111101  
00110100111011101100111010111001000001001001010000011000111100001110  
11100100000110110011001011100001111001011011100100000110000101000001  
10110011011111110100010000011001101110010110111111011010100000111010  
0110100011001010100000110001111011111101011110010111001111001010100  
00011000011101110110010001000001001001010000011001011101110110101011  
01111111100101000001101001111010001000001110110110010111100101111001  
010000011011011110101110001111010000101110

原文：

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Program ended with exit code: 0