

Plain text OK

Ascii key for O =79 = hexadecimal 4F= binary = 0100 1111

Ascii key for K= 75= 4B= 0100 1011

From Key generator we derived sub keys k1 and k2

K0 = 1010 0110

K1= 1011 0111

Function (F) can be any complex operation,

Here suppose we use function (F) = AND operation

Input		Output
A	B	Y=A.B
0	0	0
0	1	0
1	0	0
1	1	1

A	B	XOR
0	0	0
0	1	1
1	0	1
1	1	0

For first round

F0= AND of R0 and K0

= 0100 1011 AND 1010 0110

= 00000010

R1=L0 XOR F0

=0100 1111 X-OR 00000010

= 01001101

L1= R0=0100 1011

For Second round

F1= AND of R1 and K1

= 01001101 AND 1011 0111= 00000101

$R2 = L1 \text{ XOR } F1$

$= 0100\ 1011 \text{ XOR } 00000101$

$= 01001110$

$L2 = R1 = 01001101$

Now swap L2 and R2

$Lc = 01001110 = 4E = 78 = N$

$Rc = 01001101 = 4D = 77 = M$

Now decryption