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1. select plain text

$m = 10101100 \ 10001101 \ 101001001$
 00101110

here. $m \text{ (length)} = 32$, $l = 8$ (block length)

2. Generate initialization vector.

$IV = 11010011$

3. fix ipad and opad values (constants)

$ipad = 00110110$

$opad = 01011100$

4. Divide plaintext into chunks

$m_1 = 10101100$

$m_2 = 11001101$

$m_3 = 10100001$

$m_4 = 00101110$

5. compute $z_0 = IV \parallel (x \text{ XOR } ipad)$ for chunk 1

$m_1 = 10101100$

$ipad = 00110110$

$x \text{ XOR } ipad = 1011010$

Concatenate with IV $z_1 = z_0 \parallel m_1$

$z_1 = 11010011 \ 00110110 \parallel 10101100$

8. Compute $z_2 = z_1 \parallel m_2$
 $z_2 = 11010011100110 \dots \parallel 1100101101$

9. Repeat for remaining chunk.

$$z_3 = z_2 \parallel m_2$$

$$z_4 = z_3 \parallel m_4$$

10. Compute $z(k+1) = z_k \parallel z$

here $l = 32$ bits.

$$\therefore L = 0010000$$

11. Compute $p = IV \parallel (K \oplus K \oplus \text{opad})$

for first chunk m_1 ,

$$m_1 = 10101100$$

$$\text{opad} = 01011100$$

$$K \oplus K \oplus \text{opad} = 11110000$$

Concatenate with IV

$$p = IV \parallel (K \oplus K \oplus \text{opad})$$

$$= 11010011 \parallel 11110000$$

12. Compute $v = G \parallel z(G \parallel p)$

$$G = 00001000100101111$$

15. The final HMAC tag(t)
 $t = 00101110$