// C program of finding modulo multiplication

#include<stdio.h>

// Returns (a \* b) % mod

long long moduloMultiplication(long long a,

                               long long b,

                               long long mod)

{

    long long res = 0;  // Initialize result

    // Update a if it is more than

    // or equal to mod

    a %= mod;

    while (b)

    {

        // If b is odd, add a with result

        if (b & 1)

            res = (res + a) % mod;

        // Here we assume that doing 2\*a

        // doesn't cause overflow

        a = (2 \* a) % mod;

        b >>= 1;  // b = b / 2

    }

    return res;

}

// Driver program

int main()

{

    long long a = 10123465234878998;

    long long b = 65746311545646431;

    long long m = 10005412336548794;

    printf("%lld", moduloMultiplication(a, b, m));

    return 0;

}