```c
#include <stdio.h>
#include <stdbool.h>

// Check if a polynomial is irreducible in GF(2)
bool is_irreducible(int poly, int m) {
    int x = 2; // x in binary (10)
    int mod = (1 << m) | 1; // Generate a polynomial of degree m

    for (int i = 1; i < (1 << m) - 1; i++) {
        x = (x << 1) ^ ((x & (1 << (m - 1))) ? poly : 0);
        if (x == 2) return false; // If we loop back to x, it's reducible
    }
    return true;
}

// Find the first irreducible polynomial of degree m
int find_irreducible_polynomial(int m) {
    for (int poly = (1 << m) | 1; poly < (1 << (m + 1)); poly += 2) {
        if (is_irreducible(poly, m)) {
            return poly;
        }
    }
    return -1;
}

int main() {
    int m;
    printf("Enter m for GF(2^m): ");
    scanf("%d", &m);

    int irreducible_poly = find_irreducible_polynomial(m);
```

```c
    if (irreducible_poly != -1) {

        printf("Irreducible monic polynomial for GF(2^%d): x^%d", m, m);

        for (int i = m - 1; i >= 0; i--) {

            if (irreducible_poly & (1 << i)) {

                printf(" + x^%d", i);

            }

        }

        printf("\n");

    } else {

        printf("No irreducible polynomial found!\n");

    }


    return 0;

}
```