Josephus in C++

```
#include <iostream>
using namespace std;

int solution(int n, int k) {
    if (n == 1) {
        return 0;
    }
    int x = solution(n - 1, k);
    int y = (x + k) % n;
    return y;
}

int main() {
    int n = 4;
    int k = 2;
    cout << solution(n, k) << endl;
    return 0;
}
```

Dry Run Table for solution(4, 2)

We'll compute this step-by-step recursively:

Function Call	Value Returned	Explanation
solution(1, 2)	0	Base case: Only one person, return 0
solution(2, 2)	(0 + 2) % 2 = 0	Last survivor in 2 people = 0
solution(3, 2)	(0 + 2) % 3 = 2	Last survivor in 3 people = 2
solution(4, 2)	(2 + 2) % 4 = 0	Last survivor in 4 people = 0

✅ **Final Output:**

0

Output:-
0