Subsequence with GCD in C++

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

class SubsequencewithGCD {
public:
    static void main() {
        int arr[] = {1, 2, 3, 4};
        int n = sizeof(arr) / sizeof(arr[0]);

        int ans = 0;
        for (int i = 0; i < n; i++) {
            ans = gcd(ans, arr[i]);
        }

        if (ans == 1) {
            cout << "true" << endl;
        } else {
            cout << "false" << endl;
        }
    }

    static int gcd(int a, int b) {
        if (b == 0) {
            return a;
        } else {
            return gcd(b, a % b);
        }
    }
};

int main() {
    SubsequencewithGCD::main();
    return 0;
}
```

Dry Run on Given Input

arr[] = {1, 2, 3, 4}

Let's compute:

Step	i	arr[i]	Current GCD (ans)
1	0	1	gcd(0, 1) = 1
2	1	2	gcd(1, 2) = 1
3	2	3	gcd(1, 3) = 1
4	3	4	gcd(1, 4) = 1

✅ Final GCD = 1 → So the output will be:

true

✅ Output

true

true