

Sum of Natural Numbers using loop

```
#include <iostream>
using namespace std;
int main() {
    int n, sum = 0;
    cout << "Enter a positive integer: ";
    cin >> n;
    for (int i = 1; i <= n; ++i) {
        sum += i;
    }
    cout << "Sum = " << sum;
    return 0;
}
```

C++ Program to Check Leap Year or Not

```
#include <iostream>
using namespace std;
int main() {
    int year;
    cout << "Enter a year: ";
    cin >> year;
    // leap year if perfectly divisible by 400
    if (year % 400 == 0) {
        cout << year << " is a leap year.";
    }
    // not a leap year if divisible by 100
    // but not divisible by 400
    else if (year % 100 == 0) {
        cout << year << " is not a leap year.";
    }
    // leap year if not divisible by 100
    // but divisible by 4
    else if (year % 4 == 0) {
        cout << year << " is a leap year.";
    }
    // all other years are not leap years
    else {
        cout << year << " is not a leap year.";
    }
    return 0;
}
```

