

Program 1

```
//20191128 Jian Park
#include <iostream>
using namespace std;

int main() {
    int a, b, sum=0;

    cin >> a >> b; // input two numbers a and b
    for(int i=a; i<=b; i++){ // when i is b from a
        sum=sum+i; // add i to sum
    }
    cout << sum << endl; // output sum
    return 0;
}
```

To get the sum of all integer numbers use for loop

Program 2

```
//20191128 Jian Park
#include <iostream>
using namespace std;

int main() {
    int a, i=2, result = 1; // a is input value, result is output value

    cin >> a ; // input number that to know prime number
    if (a==1)result = 0; // 1 is not prime number
    else {
        while(i < a) {
            if(a%i==0) {
                result = 0; // if the remainder divided by i is 0, it is not prime number
                break;
            } else {
                i++;
            }
        }
    }
    cout << result << endl;
    return 0;
}
```

A prime number is a number divided by 1 and itself. So if the remainder divided by another natural number i ($2 < i < a$) is 0, it is not a prime number.