```cpp
#include<iostream>
#include <math.h>
using namespace std;
//============================ problem1 ============================//
/*int isDivisible(int num1, int num2) {
    if (num2 == 0) {
        cout << "Error" << endl;
        return 0;
    }
    return num2 % num1 == 0;
}
int main() {
    int number1, number2;
    cin >> number1 >> number2;
    if (isDivisible(number1, number2)) {
        cout << number1 << " is divisible by " << number2;
    }
    else {
        cout << number1 << " is not divisible by " << number2;

    }
}*/


//============================== problem 2 ========================//+
/*int isArmstrong(int num) {
    int sum = 0, remainder;
    int countDigit = 0;
    int number = num;

    // to count digits of number
    int temp = num;
    while (temp != 0) {
        temp /= 10;
        countDigit++;
    }
        //
        temp = num;
        while (temp != 0) {
            remainder = temp % 10;
            sum += pow(remainder, countDigit);
            temp /= 10;
        }
        return sum == number;

    }

int main() {
    int lower, upper;
```

```
50      cout << "enter the lower and upper numbers : ";
51      cin >> lower >> upper;
52      cout << " Armstrong numbers brtween this are : " << endl;
53      for (int i = lower; i <= upper; i++) {
54          if (isArmstrong(i)) {
55              cout << i << "  ";
56          }
57      }
58      return 0;
59  }*/
60
61  //====================== problem 3 ====================//
62  // https://codeforces.com/group/MWSDmqGsZm/contest/223205/submission/312777198
63
64  //====================== problem 4 ====================//
65  // https://codeforces.com/group/MWSDmqGsZm/contest/223339/submission/312778557
66
67  // ====================== problem 5 ====================//
68  // https://codeforces.com/group/MWSDmqGsZm/contest/223339/submission/312780362
69
70  //====================== problem 6 ====================//
71  // https://codeforces.com/group/MWSDmqGsZm/contest/223339/submission/312781962
72
73  //====================== problem 7 ====================//
74  /*#include <iostream>
75  using namespace std;
76
77  int gcd(int a, int b) {
78      if (b == 0) return a;
79      return gcd(b, a % b);
80  }
81
82  int main() {
83      int num1, num2;
84      cout << "first number: ";
85      cin >> num1;
86      cout << "second number: ";
87      cin >> num2;
88
89      cout << "GCD of " << num1 << " and " << num2 << " = " << gcd(num1, num2) << endl;
90
91      return 0;
92  }*/
93
```

```
 94 // ====================  problem 8 ====================
 95 // https://codeforces.com/group/MWSDmqGsZm/contest/223339/
      submission/312785886
 96 //======================= problem "Bouns" ===================
 97 // https://codeforces.com/group/MWSDmqGsZm/contest/223339/
      submission/312786933
 98
 99
100
101
```