

406410114 UVA10235 Simply Emirp

```
//number N
//prime: 43 34
//emirp: 17 71
//not prime: com

#include <bits/stdc++.h>
using namespace std;

int main(){
    int i,j,k,num;
    vector <bool> prime_tb(1000005,true);

    for ( i = 2; i < 1000005;i++ ){
        if (prime_tb[i] ==true){
            for ( j = i+i; j < 1000005; j+=i )
                prime_tb[j] = false;
        }
    }

    /*
    for ( i =0 ; i <100 ;i++ )
        cout <<prime_tb[i] << " ";
    cout <<endl;
    */

    //prime: 43 34
    //emirp: 17 71
    //not prime: com

    while ( cin >>num){
        cout << num ;
        int numtemp = num;
        if ( prime_tb[num] == false )
            cout << " is not prime.\n";
        else{// prime_tb[num] == true
            int inver_num = 0;
            while ( numtemp != 0 ){
                inver_num *= 10; //times 10
                inver_num += numtemp%10; // add end
                numtemp /=10; // forward
            }

            //cout << "inver_num :" << inver_num<<endl;
            if ( inver_num !=num && prime_tb[inver_num] == true )
                cout << " is emirp.\n";
            else
                cout << " is prime.\n";
        }
    }

    return 0 ;
}
```