

406410114 UVA10931 Parity

```
//input int end:0
//output dec to binary 1's num

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

int main(){
    int i,j,k,t;

    cin >> t;
    while ( t != 0 ){
        int one_num = 0;
        vector<int> t_bin;

        while ( t != 0 ){
            //cout << "t: " << t;
            if ( t%2 == 1 ){
                t_bin.push_back(1);
                one_num++;
            }
            else
                t_bin.push_back(0);
            t /=2;
        }
        //while

        cout <<"The parity of ";

        //cout << "\n t_bin.size(): "<< t_bin.size()<<endl;
        for ( i = t_bin.size()-1;i>=0;i-- )
            cout << t_bin[i];
        cout << " is " << one_num << " (mod 2).\n";

        cin >>t;
        t_bin.clear();
    }
    //while

    return 0;
}
//main
```