

406410114 UVA10019 Funny Encryption Method

//使用Java的考生請注意，最外層的類別(class)需命名為 main 。
 //如果遇到超乎想像的狀況，請更改編譯器試看看!! 各編譯器特性不同!!
 //預設測資、隨機測資、固定測資是用來幫助除錯用的。批改時，只看暗中測資是否通過!!

```
// input n
//output (dec to binary 1's num) and ( hex to binary 1's num )
#include <bits/stdc++.h>
using namespace std;

int dec_to_bin_one_num( int dec,vector <int> binary ){
    int i,j,k,one_num = 0;
    for ( i = binary.size(); i>=0 ;i-- ){
        //cout << "dec/binary[i]: " << dec/binary[i] <<endl;
        if ( dec/binary[i] == 1 ){
            one_num++;
            dec %= binary[i];
        }//if
    }//for

    return one_num;
}//dec_to_bin_one_num

int main(){
    int i,j,k,n,temp;
    vector <int> binary,hex;
    temp = 1;
    for ( i = 1 ;i <20;i++ ){
        binary.push_back( temp );
        temp *=2;
    }//for

    cin >>n;
    while (n--){
        int num1,hex_temp = 0;
        cin >> num1;
        cout << dec_to_bin_one_num( num1,binary )<< " ";

        //cout <<"hex_temp: "<<hex_temp<<endl;
        hex_temp += (num1/10000) *(16*16*16*16);
        num1 %= 10000;
        //cout <<"hex_temp: "<<hex_temp<<endl;
        hex_temp += (num1/1000) *(16*16*16);
        num1 %= 1000;
        //cout <<"hex_temp: "<<hex_temp<<endl;
        hex_temp += (num1/100) *(16*16);
        num1 %= 100;
        //cout <<"hex_temp: "<<hex_temp<<endl;
        hex_temp += (num1/10) *(16);
        num1 %= 10;
        //cout <<"hex_temp: "<<hex_temp<<endl;
        hex_temp+= (num1);

        //cout << "hex_temp should is : " <<2*16*16+6*16+5 <<endl;
        //cout <<"hex_temp: "<<hex_temp<<endl;
        cout << dec_to_bin_one_num( hex_temp,binary ) << endl;

    }//while
```

```
        return 0;  
    } //main
```

```
//== 以上是自[瘋狂雲端]下載的資料 請自行剪貼到各檔中進行寫作  
/*  
//使用Java的考生請注意，最外層的類別(class)需命名為 main 。  
//如果遇到超乎想像的狀況，請更改編譯器試看看!! 各編譯器特性不同!!  
//預設測資、隨機測資、固定測資是用來幫助除錯用的。批改時，只看暗中測資是否通過!!  
  
//*/
```