

406410114 UVA10415 Eb Alto Saxophone Player

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

void finger_add( int finger[],int add[],int n ){
    int i,j,k;
    for ( i = 0;i<n;i++ ){
        finger[add[i]]++;
    }//for

}

} //finger_add
int main(){
    int i,j,k,t_num;

    char octave[] = "XcdefgabCDEFGAB";
    char finger_info[16][11] = {
        "0000000000"/>*X*/,"0111001111"/>*c*/,"
        "0111001110"/>*d*/,"0111001100"/>*e*/,"
        "0111001000"/>*f*/,"0111000000"/>*g*/,"
        "0110000000"/>*a*/,"0100000000"/>*b*/,"
        "0010000000"/>*c*/,"1111001110"/>*D*/,"
        "1111001100"/>*E*/,"1111001000"/>*F*/,"
        "1111000000"/>*G*/,"1110000000"/>*A*/,"
        "1100000000"/>*B*/};

    cin >> t_num;
    int cur = 0,next;
    while( t_num-- ){
        string s;
        cin >>s;
        int finger[10] ;
        fill ( finger,finger+10,0 );
        for ( i = 0;i <s.length();i++ ){
            for ( next = 1;octave[next] !=s[i];next++ )
                ;// run
            if ( i == 0 ){
                for( j = 0;j<10;j++ )
                    if( finger_info[next][j] =='1' )
                        finger[j]++;

                }//if
            else{
                for( j = 0;j<10;j++ )
                    if( finger_info[cur][j] =='0' && finger_info[next][j] =='1' )
                        finger[j]++;

                }//else
            cur = next;
        }//for

        for ( i = 0;i<10;i++ ){
            cout << finger[i] ;
            if ( i <9 )
                cout <<" ";
        }//for
        cout <<endl;
    }//while
    return 0;
} //main()
```