```cpp
#include <iostream>
#include <string.h>
using namespace std;
int crc(char *ip, char *op, char *poly, int mode)
{
    strcpy(op, ip);
    if (mode) {
            for(int i=1; i< strlen(poly); i++)
                    strcat(op,"0");
    }
    for (int i=0; i< strlen(ip); i++)
    {
        if (op[i] == '1') {
            for (int j=0; j < strlen(poly); j++)
            {   if (op[i+j] == poly[j])
                        op[i+j] = "0";
                else  op[i+j] = '1';
            }
        }
    }
    for (int i=0; i< strlen(op); i++)
            if (op[i] == '1')  return 0;

    return 1;
}
int main()
{   char ip[50], op[50], recv[50];
    char poly[] =
    cout << "Enter input message in binary" << endl;
    cin >> ip;
    crc(ip, op, poly, 1);
    cout << "Transmitted message is :" << ip << op+ strlen(ip) << endl;
    cout << "Enter msg in binary" << endl;
    cin >> recv;
    if ( crc(recv, op, poly, 0)) {cout << "No error in data" << endl;
    else { cout << "Error in data" << endl; }
    return 0;
}
```