// KMP 字符串匹配

char P[maxn]; // Pattern 短串

char T[maxn]; // Text 长串

int f[maxn];

void getFail(char\* P,int\* f) {

//字符串p自我匹配

int m = strlen(P);

f[0] = f[1] = 0;

for(int i = 1; i < m; i++) {

int j = f[i];

while(j && P[i]!=P[j])

j = f[j];

f[i+1] = P[i]==P[j] ? j+1 : 0;

}

}

void Find(char\* T, char\* P, int\* f) {

//p去匹配字符串T

int n = strlen(T), m = strlen(P);

getFail(P, f); //得出部分匹配表

int j = 0;

//j:短串的下标 i: 长串下标

for (int i = 0; i < n; i++) {

while (j && P[j] != T[i])

j = f[j];

if (P[j] == T[i]) j++;

if(j == m)

printf("%d ", i-m+1);

}

puts("");

}

int main() {

// c++ getline(cin, P)

// c gets(P)

while (gets(P))

{gets(T); Find(T, P, f);}

}