#include <stdio.h>

#include <conio.h>

#include <ctype.h>

#include <string.h>

#include <iostream>

using namespace std;

int main()

{

char key[11][10] = {"for", "while", "do", "then", "else", "break", "switch", "case", "if", "continue"};

char oper[13] = {'+', '-', '\*', '/', '%', '&', '<', '>', '=', ';', ':', '!'};

char a[20], b[20], c[20];

int i, j, l, m, k, flag;

cout << "\n ENTER THE EXPRESION = ";

cin >> a;

i = 0;

while (a[i])

{

flag = 0;

j = 0;

l = 0;

b[0] = '\0';

if ((toascii(a[i] >= 97)) && (toascii(a[i] <= 122)))

{

if ((toascii(a[i + 1] >= 97)) && (toascii(a[i + 1] <= 122)))

{

while ((toascii(a[i] >= 97)) && (toascii(a[i] <= 122)))

{

b[j] = a[i];

j++;

i++;

}

b[j] = '\0';

}

else

{

b[j] = a[i];

i++;

b[j + 1] = '\0';

}

for (k = 0; k <= 9; k++)

{

if (strcmp(b, key[k]) == 0)

{

flag = 1;

break;

}

}

if (flag == 1)

cout << "\n" << b << " --> IS THE KEYWORD";

else

cout << "\n" << b << " --> IS THE IDENTIFIER";

}

else if ((toascii(a[i] >= 48)) && (toascii(a[i] <= 57)))

{

if ((toascii(a[i + 1] >= 48)) && (toascii(a[i + 1] <= 57)))

{

while ((toascii(a[i] >= 48)) && (toascii(a[i] <= 57)))

{

c[l] = a[i];

l++;

i++;

}

}

else

{

c[l] = a[i];

i++;

l++;

}

c[l] = '\0';

cout << "\n" << c << " --> IS THE CONSTANT";

}

else

{

for (m = 0; m < 13; m++)

{

if (a[i] == oper[m])

{

cout << "\n" << a[i] << " --> IS THE OPERATOR";

break;

}

}

if (m >= 13)

cout << "\n" << a[i] << " --> IS THE SYMBOL", a[i];

i++;

}

}

return 0;

}