CODE:  
#include <stdio.h>

#include <ctype.h>

#include <string.h>

void lex(char \*c) {

while (\*c) {

if (isspace(\*c)) c++;

else if (isalpha(\*c) || \*c == '\_') {

printf("Identifier: %c\n", \*c);

while (isalnum(\*++c) || \*c == '\_');

} else if (isdigit(\*c)) {

printf("Constant: %c\n", \*c);

while (isdigit(\*++c));

} else if (strchr("+-\*/=<>!", \*c)) {

printf("Operator: %c\n", \*c++);

} else {

printf("Symbol: %c\n", \*c++);

}

}

}

int main() {

char c[] = "int a = 10 + 20;";

lex(c);

return 0;

}

