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1 #include <stdio.h>
2 #include <ctype.h>
3 #include <string.h>
4 int main() {
5     int i, ic = 0, m, cc = 0, oc = 0, j;
6     char b[100], operators[30], identifiers[30];
7     int constants[30];
8     printf("Enter the string: ");
9     scanf("%[^\n]", b);
10    for (i = 0; i < strlen(b); i++) {
11        if (isspace(b[i])) {
12            continue;
13        }
14        else if (isalpha(b[i])) {
15            identifiers[ic++] = b[i];
16        }
17        else if (isdigit(b[i])) {
18            m = b[i] - '0';
19            i++;
20            while (isdigit(b[i])) {
21                m = m * 10 + (b[i] - '0');
22                i++;
23            }
24            i--;
25            constants[cc++] = m;
26        }
```

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27     else {
28         if (b[i] == '+' || b[i] == '-' || b[i] == '*' ||
            b[i] == '=') {
29             operators[oc++] = b[i];
30         }
31     }
32 }
33 printf("Identifiers: ");
34 for (j = 0; j < ic; j++)
35     printf("%c ", identifiers[j]);
36 printf("\nConstants: ");
37 for (j = 0; j < cc; j++)
38     printf("%d ", constants[j]);
39 printf("\nOperators: ");
40 for (j = 0; j < oc; j++)
41     printf("%c ", operators[j]);
42 printf("\n");
43 return 0;
44 }
```

Enter the string: $a = 25 + b - 3 * c$

Identifiers: a b c

Constants: 25 3

Operators: = + - *