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1: #include <iostream>
2: #include <string>
3:
4: using namespace std;
5:
6: int main(){
7:     int mode;
8:     bool end = false;
9:     string str;
10:    string text[5], graph[5];
11:    text[0] = "(happy)";          graph[0] = "^w^";
12:    text[1] = "(heart)";          graph[1] = "<3";
13:    text[2] = "(confused)";       graph[2] = "?_?";
14:    text[3] = "(kiss)";           graph[3] = "-3-";
15:    text[4] = "(speechless)";     graph[4] = "= =";
16:    size_t found;
17:
18:    do{
19:        cout << "Please enter the mode: ";
20:        cin >> mode;
21:        if(mode == -1){
22:            end = true;
23:            cout << "Program ends...\n";
24:            continue;
25:        }
26:        cout << "Input: ";
27:        cin.ignore(100, '\n');
28:        getline(cin, str);
29:        if(mode == 0){
30:            for(unsigned int i = 0; i < 5; i++){
31:                found = str.find(text[i]);
32:                while(found != string::npos){
33:                    str.replace(found, text[i].length(), graph[i]);
34:                    found = str.find(text[i], found);
35:                }
36:            }
37:        }
38:        else if(mode == 1){
39:            for(unsigned int i = 0; i < 5; i++){
40:                found = str.find(graph[i]);
41:                while(found != string::npos){
42:                    str.replace(found, graph[i].length(), text[i]);
43:                    found = str.find(graph[i], found);
44:                }
45:            }
46:        }

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47:         cout << "Output: " << str << endl;
48:         cout << "-----" << endl;
49:     }while(!end);
50:
51:     return 0;
52: }
```