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1 #include <iostream>
2 #include <sstream>
3 #include <algorithm>
4 #include <vector>
5 #include <cctype>
6 using namespace std;
7 char data[256];
8
9 // trim from start
10 static inline std::string &ltrim(std::string &s) {
11     s.erase(s.begin(), std::find_if(s.begin(), s.end(),
12         std::not1(std::ptr_fun<int, int>(std::isspace))));
13     return s;
14 }
15
16 // trim from end
17 static inline std::string &rtrim(std::string &s) {
18     s.erase(std::find_if(s.rbegin(), s.rend(),
19         std::not1(std::ptr_fun<int, int>(std::isspace))).base(), s.end());
20     return s;
21 }
22
23 // trim from both ends
24 static inline std::string &trim(std::string &s) {
25     return ltrim(rtrim(s));
26 }
27
28 static inline vector<string> split(const string &s, const string pat) {
29     vector<string> v;
30     if(s.empty()) {
31         return v;
32     }
33     int i=0, j=0;
34     while(i<s.size() && (j = s.find(pat, i)) != string::npos) {
35         if(i!=j) {
36             auto tok = s.substr(i, j-i);
37             v.push_back(tok);
38         }
39         v.push_back(pat);
40         i = j+pat.size();
41     }
42     if(i<s.size() && i!=j) {
43         auto tok = s.substr(i, j-i);
44         if(!tok.empty()) {
45             v.push_back(tok);
46         }
47     }
48 }

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49     return v;
50 }
51
52 int main()
53 {
54     string s = R"(
55         //@TCEMBED
56
57     )";
58     stringstream ss(s);
59     vector<string> v;
60     while(!ss.eof()) {
61         ss.getline(data, 256);
62         string str(data);
63         trim(str);
64         if(!str.empty()) {
65             if(!(str[0] == str[1] && str[0] == '/')) {
66                 v.push_back(str);
67             }
68         }
69     }
70     if(v.size() == 0) {
71         cerr << "You have not entered anything." << endl;
72     } else {
73         string raw;
74         vector<string> vs;
75         for(auto &x : v) {
76             stringstream st(x);
77             while(!st.eof()) {
78                 string temp;
79                 st >> temp;
80                 xint i=0, j=0;
81                 while(i < temp.size()) {
82                     switch(temp[i]) {
83                         case '{':
84                             if(i != j) {
85                                 vs.push_back(temp.substr(j, i-j));
86                             }
87                             vs.push_back("{");
88                             j = i+1;
89                             break;
90                         case ',':
91                             if(i != j) {
92                                 vs.push_back(temp.substr(j, i-j));
93                             }
94                             vs.push_back(",");
95                             j = i+1;
96                             break;

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97         case '}':
98             if(i != j) {
99                 vs.push_back(temp.substr(j, i-j));
100             }
101             vs.push_back("{}");
102             j = i+1;
103             break;
104         case ';':
105             if(i != j) {
106                 vs.push_back(temp.substr(j, i-j));
107             }
108             vs.push_back(";");
109             j = i+1;
110             break;
111         default:
112             break;
113     }
114     i++;
115 }
116 if(i != j) {
117     vs.push_back(temp.substr(j, i-j));
118 }
119 raw += temp + " ";
120 // raw += temp;
121 }
122 }
123 int i=vs.size()-1;
124 while(i-1>=0 && vs[i] == vs[i-1] && vs[i] == ";") {
125     vs.pop_back();
126     i--;
127 }
128 if(raw.find("enum") == string::npos) {
129     cerr << "You have not declared enum type." << endl;
130     return 1;
131 } else if(raw.find("CourseMode") == string::npos) {
132     cerr << "CourseMode is not an enum type." << endl;
133     return 1;
134 } else if(raw.find("RESIDENTIAL") == string::npos) {
135     cerr << "RESIDENTIAL is not an identifier of CourseMode." << endl;
136     return 1;
137 } else if(raw.find("ONLINE") == string::npos) {
138     cerr << "ONLINE is not an identifier of CourseMode." << endl;
139     return 1;
140 } else if(raw.find("HYBRID") == string::npos) {
141     cerr << "HYBRID is not an identifier of CourseMode." << endl;
142     return 1;
143 } else if(vs.size() != 10) {
144     cerr << "incorrect" << endl;

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145     return 1;
146 } else {
147     if(vs[0] != "enum" || vs[2] != "{" || vs[4] != "," || vs[6] != "," || v
148         cerr << "Invalid syntax" << endl;
149         return 1;
150     } else if(vs[1] != "CourseMode") {
151         cerr << "incorrect" << endl;
152         return 1;
153     } else if(vs[3] != "RESIDENTIAL" || vs[5] != "ONLINE" || vs[7] != "HYBR
154         cerr << "Order of the identifiers should be maintained." << endl;
155         return 1;
156     } else {
157         cout << "correct" << endl;
158         return 0;
159     }
160 }
161 }
162 return 1;
163 }
164
```