

```
#include <bits/stdc++.h>
```

```
using namespace std;
```

```
/*
```

```
 * Complete the 'syllables' function below.
```

```
 *
```

```
 * The function is expected to return an INTEGER.
```

```
 * The function accepts STRING word as parameter.
```

```
 */
```

```
vector<string> prefix {"co", "de", "dis", "pre", "re", "un"};
```

```
vector<string> suffix {"age", "ful", "ing", "less", "ment"};
```

```
vector<string> combo {"ch", "ck", "ph", "sh", "th", "wh", "wr"};
```

```
vector<char> vowel {'a', 'e', 'i', 'o', 'u'};
```

```
pair<bool, bool> checkOne(string word, int i) {
```

```
    // check if i -> consonant...
```

```
    bool g, ic, l, r;
```

```
    g = 0;
```

```
    for(char j: vowel) {
```

```
        if(word[i] == j) {
```

```
            g = 1;
```

```
            break;
```

```
        }
```

```
    }
```

```
    if(g) {
```

```
        return make_pair(false, false);
```

```
}
```

```
// check if it is a combo...
```

```
ic = 0;
```

```
for(string j: combo) {
```

```
    if(word.substr(i, 2) == j) {
```

```
        ic = 1;
```

```
        break;
```

```
    }
```

```
}
```

```
// check if left and right are vowels...
```

```
l = 0, r = 0;
```

```
for(char j: vowel) {
```

```
    l |= word[i-1] == j;
```

```
    r |= word[i + (ic ? 2 : 1)] == j;
```

```
}
```

```
if(!l || !r) {
```

```
    return make_pair(false, ic);
```

```
}
```

```
return make_pair(true, ic);
```

```
}
```

```
bool checkTwo(string word, int i) {
```

```
    bool g, ic;
```

```
// check if i -> consonant...
```

```
g = 0;
for(char j: vowel) {
    if(word[i] == j) {
        g = 1;
        break;
    }
}
```

```
if(g) {
    return false;
}
```

```
// check if it is a combo...
ic = 0;
for(string j: combo) {
    if(word.substr(i, 2) == j) {
        ic = 1;
        break;
    }
}
```

```
if(ic) {
    return false;
}
```

```
// check vowel before and after...
g = 0;
for(int j = i-1; j >= 0; --j) {
    for(char k: vowel) {
```

```
        if(word[j] == k) {  
            g = 1;  
            break;  
        }  
    }  
    if(g) {  
        break;  
    }  
}
```

```
if(!g) {  
    return false;  
}
```

```
g = 0;  
for(int j = i+1; j < word.length(); ++j) {  
    for(char k: vowel) {  
        if(word[j] == k) {  
            g = 1;  
            break;  
        }  
    }  
    if(g) {  
        break;  
    }  
}
```

```
if(!g) {  
    return false;  
}
```

```

    }

    return true;
}

int syllables(string word) {
    int s = 0, c = 0;
    for(int i = 0; i < prefix.size(); ++i) {
        if(word.substr(0, prefix[i].length()) == prefix[i]) {
            word = word.substr(prefix[i].length());
            s = prefix[i].length();
            c = prefix[i].length()+1;
            break;
        }
    }

    for(int i = 0; i < suffix.size(); ++i) {
        if(word.substr(word.length()-suffix[i].length()) == suffix[i]) {
            s += c + word.length() - suffix[i].length();
            word = word.substr(0, word.length()-suffix[i].length());
            ++c;
            break;
        }
    }

    for(int i = 1; i < word.length()-1; ++i) {
        pair<bool, bool> r1 = checkOne(word, i);

        if(r1.first) {

```

```

    word = word.substr(i);

    s += c + i;

    c += i + 1;


    i = 0;
    if(r1.second) {
        ++i;
    }
}
else{
    bool r2 = checkTwo(word, i);

    if(r2) {
        word = word.substr(i+1);
        s += c + i + 1;
        c += i + 2;

        i = 0;
    }
}

return s;
}

int main()
{
    ofstream fout(getenv("OUTPUT_PATH"));

    string word;

```

```
getline(cin, word);
```

```
int result = syllables(word);
```

```
fout << result << "\n";
```

```
fout.close();
```

```
return 0;
```

```
}
```