```
1  inclass assignment 2 Fenchao Du
2
3  #include <string>
4
5  using namespace std;
6
7  bool isPalindrome(const string & str) {
8      int i = 0, j = str.size()-1;
9      while(i < j) {
10         /* find next valid letter */
11         while(i < str.size() &&
12             (tolower(str[i]) < 'a' || tolower(str[i]) > 'z')) {
13             ++i;
14         }
15
16         /*
17          * if no valid letter in string,
18          * we consider it's empty and a valid palindrome
19          */
20         if (i == str.size()) {
21             return true;
22         }
23
24         /* if we reach here, there is at least one letter, j is always valid
25         while(tolower(str[j]) < 'a' || tolower(str[j]) > 'z') {
26             --j;
27         }
28
29         if (tolower(str[i]) != tolower(str[j])) {
30             return false;
31         }
32
33         ++i;
34         --j;
35     }
36     return true;
37 }
```