Anagram

```
#include<iostream>
#include<string>
#include<algorithm>
using namespace std;
int Anagram(string s1, string s2){
   if(s1.size() != s2.size())  return 0;
   else{
      for (char &c : s1) {
       c = tolower(c);
   }
      for (char &c : s2) {
       c = tolower(c);
   }
      sort(s1.begin(),s1.end());
      sort(s2.begin(), s2.end());
      return s1 == s2;
   }
}
int main(){
   string str1,str2;
   cout<<"Enter string 1: ";
   getline(cin,str1);
   cout<<"Enter string 2: ";
   getline(cin,str2);
   if(Anagram(str1, str2))
      cout<<"Anagram";
```

```
PS C:\Users\rishe\Desktop\C++> .\Anagram
Enter string 1: Rock
Enter string 2: Cork
Anagram
```

```
    else
        cout<<"Not Anagram";
}
```

Pangram

```
#include <iostream>
#include <string>
#include <cctype>
using namespace std;
bool isPangram(const string &str) {
    bool seen[26] = {false};
    int count = 0;
    for (char c : str) {
        if (isalpha(c)) {
            c = tolower(c);
            int index = c - 'a';
            if (!seen[index]) {
                seen[index] = true;
                count++;
            }
        }
    }
    return (count == 26);
}
int main() {
    string str;
```

```
    cout << "Enter a phrase to check : ";
    getline(cin, str);
    if (isPangram(str)) cout<<"The string is a Pangram.\n";
   else cout<<"The string is not a Pangram.\n";
    return 0;
}
```

```
PS C:\Users\rishe\Desktop\C++> .\Pangram
Enter a phrase to check : The quick brown fox jumps over the lazy dog
The string is a Pangram.
```

```
//To check How many characters to be removed to make the given string as Palindrome
#include<iostream>
#include<string>

using namespace std;

int main(){
   string str;
   cout<<"Enter a string: ";
   getline(cin,str);
   int f[26] = {0};
   int i,count = 0;
   for(i = 0 ; str[i] != '\0' ; i++){
      if(str[i] >= 'A' && str[i] <= 'Z'){
         str[i] += 32;
      }
      if(str[i] >= 'a' && str[i] <= 'z'){
      int index = str[i] - 'a';
```

```
        f[index]++;
    }
}
    for(i = 0 ; i < 26 ; i++){
        if (f[i] % 2 != 0){
            count++;
        }
    }
    int res = count = 0 ? 0 : count - 1;
    cout<<"No. of characters needed to be removed: "<<res;
}
```

```
Enter a string: DAD
No. of characters needed to be removed: 0
```