

// <https://www.geeksforgeeks.org/count-substrings-of-a-given-string-whose-anagram-is-a-palindrome/>

```
#include <bits/stdc++.h>
using namespace std;

void countSubstring(string s)
{
    int answer = 0;

    unordered_map<int, int> m;

    m[0] = 1;

    int x = 0;
    for (int j = 0; j < s.length(); j++) {
        x ^= 1 << (s[j] - 'a');

        answer += m[x];
        for (int i = 0; i < 26; ++i) {
            answer += m[x ^ (1 << i)];
        }

        m[x] += 1;
    }

    cout << answer;
}

int main()
{
    string str = "abab";

    countSubstring(str);
    return 0;
}
```

// C++ program for the above approach

```
#include <bits/stdc++.h>
using namespace std;

// Function to print count of substrings
// whose anagrams are palindromic
void countSubstring(string s)
{
    // Stores the answer
    int res = 0;

    // Iterate over the string
    for (int i = 0; i < s.length(); i++) {

        int x = 0;

        for (int j = i; j < s.length(); j++) {

            // Set the current character
            int temp = 1 << (s[j] - 'a');

            // Parity update
            x ^= temp;
        }
    }
}
```

```
                if ((x & (x - 1)) == 0)
                    res++;
            }

        // Print the final count
        cout << res;
    }

// Driver Code
int main()
{
    string str = "aaa";

    // Function Call
    countSubstring(str);

    return 0;
}
```