Code :

**#include <iostream>**

**#include <string.h>**

**using namespace std;**

**int main()**

**{**

**char str1[20], str2[20];**

**int i, j, len = 0, flag = 0;**

**cout << "Enter the string : ";**

**gets(str1);**

**len = strlen(str1) - 1;**

**for (i = len, j = 0; i >= 0 ; i--, j++)**

**str2[j] = str1[i];**

**if (strcmp(str1, str2))**

**flag = 1;**

**if (flag == 1)**

**cout << str1 << " is not a palindrome";**

**else**

**cout << str1 << " is a palindrome";**

**return 0;**

**}**

**Consideration**

**Program Explanation**

**1. The user is asked to enter a string and it is stored in the character variable ‘str1’.**

**2. The length of str1 is stored in ‘len’ using the string function strlen().**

**3. Using a for loop, str1 is copied into another variable ‘str2’ from backwards.**

**4. Both the strings str1 and str2 are compared using string function strcmp().**

**5. A temporary variable flag is used.**

**6. If str1 is equal to str2, then the entered string is a palindrome, else not.**

**7. The result is then printed.**

**Alogorithm**

1. The program takes a string and stores it.  
2. The string is copied into another string from backwards.  
3. If both the strings are equal, then the entered string is a palindrome.  
4. Else it is not.  
5. The result is printed.  
6. Exit.