Valid Palindrome

A phrase is a **palindrome** if, after converting all uppercase letters into lowercase letters and removing all non-alphanumeric characters, it reads the same forward and backward. Alphanumeric characters include letters and numbers.

Given a string s, return true*if it is a****palindrome****, or*false*otherwise*.

**Example 1:**

**Input:** s = "A man, a plan, a canal: Panama"

**Output:** true

**Explanation:** "amanaplanacanalpanama" is a palindrome.

**Example 2:**

**Input:** s = "race a car"

**Output:** false

**Explanation:** "raceacar" is not a palindrome.

**Example 3:**

**Input:** s = " "

**Output:** true

**Explanation:** s is an empty string "" after removing non-alphanumeric characters.

Since an empty string reads the same forward and backward, it is a palindrome.

**Constraints:**

* 1 <= s.length <= 2 \* 105
* s consists only of printable ASCII characters.

Solution

public class Solution {

    public bool IsPalindrome(string s) {

        string ans = "";

        foreach(char c in s){

            if(c >= 48 && c <= 57 || c >= 65 && c <= 90 || c >= 97 && c <= 122){

                if(Char.IsDigit(c)){

                    ans += c.ToString();

                }

                else{

                    ans += Char.ToLower(c);

                }

            }

        }

        string reverse = Reverse(ans);

        if(ans == reverse){

            return true;

        }

        return false;

    }

    public string Reverse( string s ) {

        char[] charArray = s.ToCharArray();

        Array.Reverse(charArray);

        return new string(charArray);

    }

}