**Day-47 of #101 days of the coding challenge-------**

**Problem:-**  Write a C++ program to sort characters (numbers and punctuation symbols are not included) in a string.  
Example:  
Sample Input: python  
Sample Output: hnopty

Code:-

#include<iostream>

#include<string>

using namespace std;

void swap(char \*a, char \*b)

{

char temp;

temp = \*a;

\*a = \*b;

\*b = temp;

}

string shortChar(string str)

{

int i, j;

string temp\_string;

for(j = 0; j<str.length(); j++)

{

for(i = 0; i<str.length()-j-1; i++)

{

if(int(str[i]) > int(str[i+1])) // converting into the ASIC Value

{

swap(&str[i] , &str[i+1]);

}

}

}

return str;

}

int main()

{

string str;

cout<<"Enter the String"<<endl;

getline(cin, str);

string result = shortChar(str);

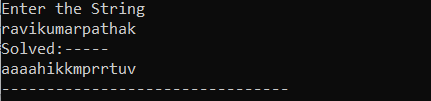
cout<<"Solved:-----"<<endl;

cout<<result;

return 0;

}

Output:-



**Problem:-**  Write a C++ program to check if a given string is a Palindrome or not.  
A palindrome is a word, number, phrase, or other sequence of characters which reads the same backward as forward, such as madam, racecar.  
Example:  
Sample Input: madam  
Sample Output: True

Code:-

#include<iostream>

#include<string>

using namespace std;

string reverseString(string str)

{

int i, index = 0;

string temp\_string = str;

for(i = str.length()-1; i>=0; i--) // revering the string

{

str[index] = temp\_string[i];

index++;

}

str[index] = '\0'; // into the last index of the string

return str;

}

void palinDrome(string str)

{

string rev = reverseString(str);

if(rev == str)

{

cout<<"String is Palindrome"<<endl;

}

else

{

cout<<"String is not palindrome"<<endl;

}

}

int main()

{

string str;

cout<<"Enter the String"<<endl;

getline(cin, str);

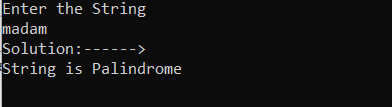
cout<<"Solution:------>"<<endl;

palinDrome(str);

return 0;

}

Output:-



**Problem:-**  Write a C++ program to change the case (lower to upper and upper to lower cases) of each character in a given string.  
Example:  
Sample Input: Pythpn  
Sample Output: pYTHON

Code:-

#include<iostream>

#include<string>

using namespace std;

string uppertoLowerToUpper(string str)

{

int i;

string tempString = "";

for(i = 0; i<str.length(); i++)

{

if(str[i] >= 'A' && str[i]<= 'Z')

{

tempString += char(int(str[i]) + 32);

}

if(str[i] >= 'a' && str[i] <= 'z')

{

tempString += char(int(str[i]) - 32);

}

}

return tempString;

}

int main()

{

string str;

cout<<"Enter the String:"<<endl;

getline(cin, str);

string result = uppertoLowerToUpper(str);

cout<<"Converted String::--->"<<result;

return 0;

}

Output:-

