***Q1.*** ***Write a C++ program that reverses a string and prints it on the screen through a character array.***

#include <iostream>

#include <cstring>

// Function to reverse a string using a character array

void reverseString(char str[]) {

int length = strlen(str);

// Swap characters from the beginning and end of the string

for (int i = 0; i < length / 2; ++i) {

char temp = str[i];

str[i] = str[length - i - 1];

str[length - i - 1] = temp;

}

}

int main() {

const int maxLength = 100; // Maximum length of the string

char inputString[maxLength];

// Get user input for the string

std::cout << "Enter a string: ";

std::cin.getline(inputString, maxLength);

// Reverse the string

reverseString(inputString);

std::cout << "Reversed string: " << inputString << std::endl;

return 0;

}