

1. Given a string. Check is it Palindrome (write with split, revert, join functions).
2. Write a function to find the count of all vowels in a given string.
3. Given a string and a number. Change each letter character in a string adding that number to a character code. Be sure to keep character between letters' codes. Return new string.
4. Given a large number. Find the difference between the most appeared largest and smallest digits.
5. Check entered password to meet the requirements.
 - a. It should contain at least eight characters.
 - b. It should consist of letters, digits and special symbols(*, !, @, \$, ^)
 - c. It should contain at least two digits.
 - d. It should contain at least one symbol.
 - e. It should contain at at least one uppercase and one lowercase letters.
6. Given an array of numbers. Find the pair of adjacent elements that have the largest product and return that product.