1.

s = input("Enter a String:\n")

v\_c = 0 #vowel counter

c\_c = 0 #consonant counter

u\_c = 0 #uppercase characters counter

l\_c = 0 #lowercase characters counter

d\_c = 0 #digit counter

space\_c = 0 #space counter

s\_c = 0 #special character counter

for i in s:

if i.isalpha(): #checks for alphabet

if i in "aeiouAEIOU": #checks for vowels

v\_c += 1

else: #if not vowel then consonant

c\_c += 1

if i.isupper(): #checks for uppercase characters

u\_c += 1

else: #if not uppercase then it is lowercase

l\_c += 1

elif i.isdigit(): #if not alphabet then checks for digit

d\_c += 1

else: #if not alphanumeric then enters this block

if i == " ":

space\_c += 1 #checks for spaces

else:

s\_c += 1 #checks for special characters

print("No. of Vowels : ",v\_c)

print("No. of Consonants : ",c\_c)

print("No. of Uppercase Characters : ",u\_c)

print("No. of Lowercase Characters : ",l\_c)

print("No. of Digit : ",d\_c)

print("No. of Spaces : ",space\_c)

print("No. of Special Characters : ",s\_c)

2.

s = input("Enter a String:\n")

rev = "" #empty string...will store the reversed sting eventually

for i in range(len(s)-1,-1,-1):

if s[i] != " ":

rev = rev + s[i]

else:

rev = rev + " "

if rev == s:

print("The given String is Palindrome")

else:

print("The given String is not Palindrome")

3.

s = input("Enter a String:\n")

d = {}

for i in s: #scans the string

if i not in d: #scans the dictionary...if not found then make the value 1

d[i] = 1

else: #if found then increases the value by 1

d[i] += 1

print(d)

4.

s = input("Enter a String:\n")

s = s.split() #splits by keeping delimiter as a space...

d = {}

#now each word of the given string is treated as an individual element

for i in s: #scans the string for words

if i not in d: #scans the dictionary...if not found then make the value 1

d[i] = 1

else: #if found then increases the value by 1

d[i] += 1

print(d)

5.

s = input("Enter a String:\n")

s = s + " " #added a space to avoid error

rev = "" #now empty...will eventuall store the final result

k = 0 #points to the initial index of each word

for i in range(1,len(s)):

temp = "" #temporarily stores each word and gets empty after each iteration

if s[i] == " ":

for j in range(k,i):

temp = temp + s[j]

k = i+1

rev = temp + " " + rev

print(rev)