#1.

class String:

def \_init\_(self, input\_string):

self.input\_string = input\_string

self.alpha\_count = 0

self.digit\_count = 0

self.special\_count = 0

self.alphabets = ""

self.digits = ""

self.specials = ""

def analyze\_string(self):

for char in self.input\_string:

if char.isdigit():

self.digits += char

self.digit\_count += 1

elif char.isalpha():

self.alphabets += char

self.alpha\_count += 1

else:

self.specials += char

self.special\_count += 1

def display\_results(self):

print(f"Count of Alphabets {self.alphabets} is {self.alpha\_count}")

print(f"Count of Digits {self.digits} is {self.digit\_count}")

print(f"Count of Special Characters {self.specials} is {self.special\_count}")

text = input("Enter a string: ")

analyzer = String(text)

analyzer.analyze\_string()

analyzer.display\_results()

#2.

class String:

def \_init\_(self, input\_string):

self.input\_string = input\_string

def validate\_string(self):

has\_alpha = any(char.isalpha() for char in self.input\_string)

has\_special = any(not char.isalnum() for char in self.input\_string)

if has\_alpha and has\_special:

return "The string contains both alphabets and special characters."

else:

return "The string does not contain both alphabets and special characters."

input\_string = input("Enter a string: ")

validator = String(input\_string)

result = validator.validate\_string()

print(result)