1Q)

month = input("Input the month (e.g. January, February etc.): ")

day = int(input("Input the day: "))

if month in ('January', 'February', 'March'):

season = 'winter'

elif month in ('April', 'May', 'June'):

season = 'summer'

elif month in ('July', 'August', 'September'):

season = 'spring'

else:

season = 'autumn'

if (month == 'March') and (day > 19):

season = 'summer'

elif (month == 'June') and (day > 20):

season = 'summer'

elif (month == 'September') and (day > 21):

season = 'autumn'

elif (month == 'December') and (day > 20):

season = 'winter'

print("Season is",season)

2Q)

def countstrings(n, start):

if n == 0:

return 1

cnt = 0

for i in range(start, 5):

cnt += countstrings(n - 1, i)

return cnt

def countVowelStrings(n):

return countstrings(n, 0)

n = 1

print(countVowelStrings(n))

]

3Q)

def first\_letter\_index(str, left, right):

index = -1

for i in range(left, right + 1):

if str[i] >= 'a' and str[i] <= 'z' :

index = i

break

return index

def last\_letter\_index(str, left, right):

index = -1

for i in range(left, right - 1, -1) :

if str[i] >= 'a' and str[i] <= 'z':

index = i

break

return index

def solve(str):

left = 0

right = len(str) - 1

flag = True

for i in range(len(str)) :

left = first\_letter\_index(str, left, right)

right = last\_letter\_index(str, right, left)

if right < 0 or left < 0:

break

if str[left] == str[right]:

left += 1

right -= 1

continue

flag = False

break

return flag

s = input("enter string:")

print(solve(s))

4Q)

a=float(input("Enter Total Number of Users : "))

b=float(input("Enter Number of Staff Users : "))

c=a-b-(b//3)

print("Student Users Are : " , c)

5Q)

def editDistance(str1, str2, m, n):

if m == 0:

return n

if n == 0:

return m

if str1[m-1] == str2[n-1]:

return editDistance(str1, str2, m-1, n-1)

return 1 + min(editDistance(str1, str2, m, n-1),

editDistance(str1, str2, m-1, n),

editDistance(str1, str2, m-1, n-1)

)

str1 = input("Enter Your String1 :")

str2 = input("Enter Your String2 :")

print (editDistance(str1, str2, len(str1), len(str2)))

6Q)

a=input("Enter first binary number:")

b=input("Enter second number:")

sum=bin(int(a,2)+int(b,2))

print("The sum of two binary numbers is:",sum[2:])

7Q)

def isScramble(S1: str, S2: str):

if len(S1) != len(S2):

return False

n = len(S1)

if not n:

return True

if S1 == S2:

return True

if sorted(S1) != sorted(S2):

return False

for i in range(1, n):

if (isScramble(S1[:i], S2[:i]) and

isScramble(S1[i:], S2[i:])):

return True

if (isScramble(S1[-i:], S2[:i]) and

isScramble(S1[:-i], S2[i:])):

return True

return False

S1 = input("enter string1:")

S2 = input("enter string2:")

if (isScramble(S1, S2)):

print("Yes")

else:

print("No")