Question1

Create a function that takes three integer arguments (a, b, c) and returns the amount of integers which are of equal value.

**Examples**

equal(3, 4, 3) ➞ 2

equal(1, 1, 1) ➞ 3

equal(3, 4, 1) ➞ 0

**Notes**

Your function must return 0, 2 or 3.

Question2

Write a function that converts a **dictionary** into a **list** of keys-values **tuples**.

### Examples

dict\_to\_list({

"D": 1,

"B": 2,

"C": 3

}) ➞ [("B", 2), ("C", 3), ("D", 1)]

dict\_to\_list({

"likes": 2,

"dislikes": 3,

"followers": 10

}) ➞ [("dislikes", 3), ("followers", 10), ("likes", 2)]

### Notes

Return the elements in the list in alphabetical order.

Question3

Write a function that creates a dictionary with each **(key, value)** pair being the **(lower case, upper case)** versions of a letter, respectively.

### Examples

mapping(["p", "s"]) ➞ { "p": "P", "s": "S" }

mapping(["a", "b", "c"]) ➞ { "a": "A", "b": "B", "c": "C" }

mapping(["a", "v", "y", "z"]) ➞ { "a": "A", "v": "V", "y": "Y", "z": "Z" }

### Notes

All of the letters in the input list will always be lowercase.

Question4

Write a function, that replaces all vowels in a string with a specified vowel.

### Examples

vow\_replace("apples and bananas", "u") ➞ "upplus und bununus"

vow\_replace("cheese casserole", "o") ➞ "chooso cossorolo"

vow\_replace("stuffed jalapeno poppers", "e") ➞ "steffed jelepene peppers"

### Notes

All words will be lowercase. Y is not considered a vowel.

Question5

Create a function that takes a string as input and capitalizes a letter if its ASCII code is even and returns its lower case version if its ASCII code is odd.

### Examples

ascii\_capitalize("to be or not to be!") ➞ "To Be oR NoT To Be!"

ascii\_capitalize("THE LITTLE MERMAID") ➞ "THe LiTTLe meRmaiD"

ascii\_capitalize("Oh what a beautiful morning.") ➞ "oH wHaT a BeauTiFuL moRNiNg."

Solutions :

#### 1.Create a function that takes three integer arguments (a, b, c) and returns the amount of integers which are of equal value.

**Examples:**  
equal(3, 4, 3) ➞ 2  
equal(1, 1, 1) ➞ 3  
equal(3, 4, 1) ➞ 0

**Notes:**  
Your function must return 0, 2 or 3.

In [1]:

**def** equal(a,b,c):

**if** a**==**b**==**c:

print(f'{a,b,c} ➞ {3}')

**elif** a**==**b **or** b**==**c:

print(f'{a,b,c} ➞ {2}')

**else**:

print(f'{a,b,c} ➞ {0}')

equal(3, 4, 3)

equal(1, 1, 1)

equal(3, 4, 1)

(3, 4, 3) ➞ 0

(1, 1, 1) ➞ 3

(3, 4, 1) ➞ 0

#### 2.Write a function that converts a dictionary into a list of keys-values tuples.

**Examples:**  
dict\_to\_list({ "D": 1, "B": 2, "C": 3 }) ➞ [("B", 2), ("C", 3), ("D", 1)] dict\_to\_list({ "likes": 2, "dislikes": 3, "followers": 10 }) ➞ [("dislikes", 3), ("followers", 10), ("likes", 2)]

**Notes:**  
Return the elements in the list in alphabetical order.

In [2]:

**def** dict\_to\_list(in\_dict):

out\_list **=** []

**for** keys,values **in** in\_dict**.**items():

out\_list**.**append((keys,values))

print(f'{in\_dict} ➞ {out\_list}')

dict\_to\_list({"D": 1,"B": 2,"C": 3})

dict\_to\_list({"likes": 2,"dislikes": 3,"followers": 10})

{'D': 1, 'B': 2, 'C': 3} ➞ [('D', 1), ('B', 2), ('C', 3)]

{'likes': 2, 'dislikes': 3, 'followers': 10} ➞ [('likes', 2), ('dislikes', 3), ('followers', 10)]

#### 3.Write a function that creates a dictionary with each (key, value) pair being the (lower case, upper case) versions of a letter, respectively.

**Examples:**  
mapping(["p", "s"]) ➞ { "p": "P", "s": "S" }  
mapping(["a", "b", "c"]) ➞ { "a": "A", "b": "B", "c": "C" }  
mapping(["a", "v", "y", "z"]) ➞ { "a": "A", "v": "V", "y": "Y", "z": "Z" }

**Notes:**  
All of the letters in the input list will always be lowercase.

In [3]:

**def** mapping(in\_list):

out\_dict **=** {}

**for** ele **in** in\_list:

out\_dict[ele] **=** ele**.**upper()

print(f'{in\_list} ➞ {out\_dict}')

mapping(["p", "s"])

mapping(["a", "b", "c"])

mapping(["a", "v", "y", "z"])

['p', 's'] ➞ {'p': 'P', 's': 'S'}

['a', 'b', 'c'] ➞ {'a': 'A', 'b': 'B', 'c': 'C'}

['a', 'v', 'y', 'z'] ➞ {'a': 'A', 'v': 'V', 'y': 'Y', 'z': 'Z'}

#### 4.Write a function, that replaces all vowels in a string with a specified vowel.

**Examples:**  
vow\_replace("apples and bananas", "u") ➞ "upplus und bununus"  
vow\_replace("cheese casserole", "o") ➞ "chooso cossorolo"  
vow\_replace("stuffed jalapeno poppers", "e") ➞ "steffed jelepene peppers"

**Notes:**  
All words will be lowercase. Y is not considered a vowel.

In [4]:

**def** vow\_replace(in\_string,vow\_char):

vowels **=** ['a','e','i','o','u']

out\_string **=** ''

**for** ele **in** in\_string:

**if** ele **in** vowels:

out\_string **+=** vow\_char

**else**:

out\_string **+=** ele

print(f'{in\_string} ➞ {out\_string}')

vow\_replace("apples and bananas", "u")

vow\_replace("cheese casserole", "o")

vow\_replace("stuffed jalapeno poppers", "e")

apples and bananas ➞ upplus und bununus

cheese casserole ➞ chooso cossorolo

stuffed jalapeno poppers ➞ steffed jelepene peppers

#### 5.Create a function that takes a string as input and capitalizes a letter if its ASCII code is even and returns its lower case version if its ASCII code is odd.

**Examples:**  
ascii\_capitalize("to be or not to be!") ➞ "To Be oR NoT To Be!"  
ascii\_capitalize("THE LITTLE MERMAID") ➞ "THe LiTTLe meRmaiD"  
ascii\_capitalize("Oh what a beautiful morning.") ➞ "oH wHaT a BeauTiFuL moRNiNg."

In [5]:

**def** ascii\_capitalize(in\_string):

out\_string **=** ''

**for** ele **in** in\_string**.**lower():

**if** (ord(ele)**%2** == 0):

out\_string **+=** ele**.**upper()

**else**:

out\_string **+=** ele

print(f'{in\_string} ➞ {out\_string}')

ascii\_capitalize("to be or not to be!")

ascii\_capitalize("THE LITTLE MERMAID")

ascii\_capitalize("Oh what a beautiful morning.")

to be or not to be! ➞ To Be oR NoT To Be!

THE LITTLE MERMAID ➞ THe LiTTLe meRmaiD

Oh what a beautiful morning. ➞ oH wHaT a BeauTiFuL moRNiNg.