Assignment 25 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):
    num = 0
    if a == b and a == c :
        num = 3
    elif a == b or a == c :
        num = 2
    else:
        num = 0
    return num
equal(3, 4, 3)
```

Out[1]:

```
2
```

In [2]:

```
equal(1, 1, 1)
```

Out[2]:

```
3
```

In [3]:

```
equal(3, 4, 1)
```

Out[3]:

```
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 [4]:

```
def dict_to_list(d):
    return list(d.items())
dict_to_list({
    "D": 1,
    "B": 2,
    "C": 3
    })
```

Out[4]:

```
[('D', 1), ('B', 2), ('C', 3)]
```

In [5]:

```
dict_to_list({
    "likes": 2,
    "dislikes": 3,
    "followers": 10
    })
```

Out[5]:

```
[('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 [6]:

```
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 [7]:

```
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 [8]:

```
def ascii_capitalize(s):
    s1 = []
    for i in range(len(s)):
        if ord(s[i]) % 2 == 0:
            s1.append(s[i].upper())
        else:
            s1.append(s[i].lower())

    return "".join((s1))
ascii_capitalize('to be or not to be!')
```

Out[8]:

```
'To Be oR NoT To Be!'
```

In [9]:

```
ascii_capitalize('THE LITTLE MERMAID')
```

Out[9]:

```
'THe LiTTLe meRmaiD'
```

In [10]:

```
ascii_capitalize("Oh what a beautiful morning.")
```

Out[10]:

```
'oH wHaT a BeauTiFuL moRNiNg.'
```

In [ ]:

```

```