

Python_basic_programming_25

In []:

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
```

In []:

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)]
```

In []:

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'}
```

In []:

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

In []:

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.