

Assignment_02_20101197_Abir_Ahammed_Bhuiyan

October 3, 2022

```
[1]: #func_1

def func(a, b):
    if(a == 0 or b == 0):
        return 0
    else:
        return a/b - int(a/b)

print(func(5, 2))
print(func(5, 0))
print(func(0, 5))
```

```
0.5
0
0
```

```
[2]: #func_2

def func_BMI(height, weight):
    height = height/100
    bmi = weight/(height*height)

    if(bmi<18.5):
        print("Score is %.1f. You are Underweight" %bmi)
    elif(bmi>=18.5 and bmi<=24.9):
        print("Score is %.1f. You are Normal" %bmi)
    elif(bmi>=25 and bmi<=30):
        print("Score is %.1f. You are Overweight" %bmi)
    else:
        print("Score is %.1f. You are Obese" %bmi)

func_BMI(175, 96)
func_BMI(152, 48)
```

```
Score is 31.3. You are Obese
Score is 20.8. You are Normal
```

```
[3]: #func_3

def func(min, max, div):

    add = 0
    for i in range(min, max):
        if(i%div == 0):
            add = add + i
    return add

print(func(0, 10, 2))
print(func(3, 16, 3))
```

20
45

```
[4]: #func_4

def func(burger_name, place = 'Mohakhali'):
    if (place == 'Mohakhali'):
        delivery_charge = 40
    else:
        delivery_charge = 60

    if(burger_name == 'Beef Burger'):
        meal_cost = 170
    elif(burger_name == 'BBQ Chicken Cheese Burger'):
        meal_cost = 250
    elif(burger_name == 'Naga Drums'):
        meal_cost = 200

    return meal_cost + delivery_charge + (meal_cost * 0.08)

print(func('Beef Burger', 'Dhanmondi'))
print(func('Beef Burger'))
```

243.6
223.6

```
[5]: #func_5

def replace_domain(email, new_domain, old_domain="kaaj.com"):
    if(email.find(old_domain) == -1):
        return "Unchanged: " + email
    else:
```

```

        email = email.split("@")
        email = email[0]
        return "Changed: " + email+"@"+new_domain

print(replace_domain('alice@kaaaj.com', 'sheba.xyz', 'kaaaj.com'))
print(replace_domain('bob@sheba.xyz', 'sheba.xyz'))

```

Changed: alice@sheba.xyz

Unchanged: bob@sheba.xyz

```

[6]: #func_6

def func(name):
    vowels = ['a', 'e', 'i', 'o', 'u']
    name = name.lower()
    found = []

    for char in name:
        if(char in vowels):
            found.append(char)

    if(len(found)!=0):
        output = "Vowels: "
        for char in found:
            output += char + ', '
        return output[:-2]+" Total number of vowels: "+str(len(found))
    else:
        return "No vowels in the name"

print(func("Steve Jobs"))
print(func("XYZ"))

```

Vowels: e, e, o. Total number of vowels: 3

No vowels in the name

```

[7]: #func_7

def isPalindrom(string):
    string = "".join(string.split())

    for i in range(0, int(len(string)/2)):

```

```

        if string[i] != string[len(string)-i-1]:
            return "Not a palindrom"
        return "Palindrom"

print(isPalindrom('madam'))
print(isPalindrom('hello'))
print(isPalindrom('nurses run'))

```

Palindrom
Not a palindrom
Palindrom

```

[8]: #func_8

def Converter(number_of_days):
    year = int(number_of_days/365)

    number_of_days = number_of_days - (365*year)

    month = int(number_of_days/30)

    days = number_of_days - (month*30)

    return str(year) + " years, " + str(month) + " months and " + str(days) + "
↪days"

print(Converter(4320))
print(Converter(4000))

```

11 years, 10 months and 5 days
10 years, 11 months and 20 days

```

[9]: #func_9

def punct(string):

    string = string.capitalize()

    string = string.split(" ")

    formatted = ""

    fullstop_mode = False
    questionmark_mode = False
    exclamationmark_mode = False

```

```

for word in string:

    if(word == 'i' or (word[0] == 'i' and word[1] in ['?', '!', '.', '"')):
        formatted = formatted + word.capitalize() + " "
        fullstop_mode = False
        questionmark_mode = False
        exclamationmark_mode = False

    elif(fullstop_mode == True):
        formatted = formatted + word.capitalize() + " "
        fullstop_mode = False

    elif(questionmark_mode == True):
        formatted = formatted + word.capitalize() + " "
        questionmark_mode = False
    elif(exclamationmark_mode == True):
        formatted = formatted + word.capitalize() + " "
        exclamationmark_mode = False
    elif(word[-1] == '.'):
        formatted = formatted + word + " "
        fullstop_mode = True

    elif(word[-1] == '?'):
        formatted = formatted + word + " "
        questionmark_mode = True

    elif(word[-1] == '!'):
        formatted = formatted + word + " "
        exclamationmark_mode = True

    else:
        formatted = formatted + word + " "

return formatted

print(punct("my favourite animal is a dog. a dog has sharp teeth so that it can
↪eat flesh very easily. do you know my pet dog's name? i love my pet very
↪much."))

```

My favourite animal is a dog. A dog has sharp teeth so that it can eat flesh very easily. Do you know my pet dog's name? I love my pet very much.

[]: