



problem 1:  
You are given a program with two inputs: one as a password and the second one as a password repeat. Complete and call the given function to output "Correct" if the password and repeat are equal, and output "Wrong", if they are not.

Sample Input  
nfs1598  
nfs1598

Sample Output  
Correct

CODE1:

```
In [2]: password = input("Enter the Password:")
repeat = input("Re-Enter the Password:")
def validate(pwd1, pwd2):
    #TO DO write your code here
    if(pwd1==pwd2):
        print("Correct")
    else:
        print("Wrong")

## call the function to get output
validate(password, repeat)

Enter the Password:rev@123
Re-Enter the Password:rev@123
Correct
```

In [ ]:

Problem 2:  
We are creating our own social network application and need to have a hashtag generator program. Complete the program to output the input text starting with the hashtag (#). Also, if the user entered several words, the program should delete the spaces between them.

Sample Input  
Rajalakshmi eduverse REV

Sample Output  
#RajalakshmieduverseREV

CODE2:

```
In [8]: s = input("Enter your message")
def hashtagGen(text):
    #TO DO write your code here

    return f"#{text.replace(' ','')}"

print(hashtagGen(s))

Enter your messageRajalakshmi eduverse REV
#RajalakshmieduverseREV
```

In [ ]:

Problem 3:  
Celsius to Fahrenheit  
You are making a Celsius to Fahrenheit converter. Write a function to take the Celsius value as an argument and return the corresponding Fahrenheit value.

Sample Input  
36

Sample Output  
96.8

CODE3:

```
In [10]: celsius = int(input("Enter the temperature value in celsius:" ))

def conv(c):
    #TO DO write your code here
    # Hint: Fahrenheit value: 9/5 * celsius + 32
    return (9/5)*c+32

fahrenheit = conv(celsius)
print(fahrenheit)

Enter the temperature value in celsius:36
96.8
```

In [ ]:

Problem 4:  
Write a function that will take in an unknown number of arguments and multiply all of them together and run the function for these 2 sets of numbers:  
1,2,3,4,5  
12,13,14

Sample Output:  
120  
2184

CODE4:

```
In [12]: def multiply_all(*x):
    #TO DO write your code here
    res=1
    for num in x:
        res=res*num
    return res

print(multiply_all(1,2,3,4,5))
print(multiply_all(12,13,14))

120
2184
```

In [ ]:

calculates the distance an object falls based on time.  
The general formula for fall distance  $d$  based on fall time  $t$  can be modeled as:

$$d = \frac{1}{2}gt^2$$

Where  $g$  is the acceleration due to gravity. On earth the value of  $g = 9.81m/s^2$ . But on the

moon,  $g = 1.625m/s^2$

Problem 5:

Write python function to Calculate fall distance d, include the default value for earth's gravity and give programmers the option of specifying a different value for g if they choose

Sample Output:  
fall\_distance(3)

44.145

CODE5:

```
In [4]: def fall_distance(t,g=9.82):
    #TO DO write your code here
    return 0.5*g*(t**2)

print(fall_distance(3,1.625))

7.3125
```

In [ ]:

Problem 6:  
write the function to print the items in the dictionary below  
dict = {"First Name":"John", "Last Name":"Wick", "Nickname":"Jojo", "Middle Name":"Candle"}  
to as per the Sample OutPut

Sample Output:  
First Name is John  
Last Name is Wick  
Nickname is Jojo  
Middle Name is Candle

CODE6:

```
In [16]: dict = {"First Name":"John", "Last Name":"Wick", "Nickname":"Jojo", "Middle Name":"Candle"}

def all_name(**kwargs):
    ##TO DO write your code here
    for key,value in kwargs.items():
        print(f"{key} is {value}")

print(all_name(**dict))

First Name is John
Last Name is Wick
Nickname is Jojo
Middle Name is Candle
None
```

In [ ]:

''' Problem 7: You work on a payroll program. Given a list of salaries, you need to take the bonus everybody is getting as input and increase all the salaries by that amount. Output the resulting list.

sample Output Input 420 Your Output [2420, 2220, 3520, 4820, 1920]

CODE7:

```
In [19]: salaries = [2000, 1800, 3100, 4400, 1500]
bonus = int(input("Enter the bonus amount:"))
## TO Do: write your code here
## Hint use the map() , Lambda function
salaries=list(map(lambda x:x+bonus,salaries))

print(salaries)

Enter the bonus amount:420
[2420, 2220, 3520, 4820, 1920]
```

In [ ]:

Problem 8:  
Write a recursive function that will sum all numbers from 1 to n. n is the argument of the function.

Sample Input:  
4

Sample Output:  
10

CODE8:

```
In [21]: def summation(n):
    ##TO DO write your code here
    if n==1:
        return n
    else:
        return n+summation(n-1)

print(summation(4))

10
```

In [ ]: