UNIT 4 Strings and String Functions

```
In [ ]:  #string values assigned to variables
         #the problem is to add two strings
         #concatenate strings
         #input
         sWord1="INF1511 "
         sWord2= "2023"
         #processing
         myTotal = sWord1+sWord2
         #output
         print('The output is : ',myTotal)
```

```
In [ ]:  #Verify what string you input ...
```

```
In [ ]:  #this example uses coded string values ... and the output may be formatted
         nDay=22
         nMonth='May'
         nYear=2023
         #print('it is', myDay, 'th day of the ', myMonth,  'th month of the year ', my
         Year)
         print('it is %d th day of %s of the year %d ' %(nDay, nMonth, nYear))
```

```
In [ ]:  #this example shows the use of user input string values rather than coded valu
         es
         #input
         myDay=int(input('Enter the day: '))
         myMonth=int(input('Enter the month: '))
         myYear=int(input('Enter the year: '))
         #processing

         #output
         print('it is', myDay, 'th day of the ', myMonth,  'th month of the year ', myY
         ear)
         print('it is %d th day of the %d th month of the year %d ' %(myDay, myMonth, m
         yYear))
```

```
In [ ]:  #this example shows the use of user input string values rather than coded valu
         es
         #this is input
         myDay=(input('Enter the name of the day : '))
         myMonth=(input('Enter the name of the month: '))
         myYear=int(input('Enter the year: '))
         #processing

         #output
         print('it is', myDay, ' in ', myMonth,  ' of the year ', myYear)
```

```
In [ ]: #This program demonstrates the use of strings and functions
        #s="The winter has already stared in GP and NW ... for 2023"
        #input
        s=input('Please input a sentence : ')
        #processing and output
        print ('Original : ', s)
        print('After toggling the case:', s.swapcase())
        print('In uppercase is : ', s.upper())
        print('In lowercase is : ', s.lower())
        print('The length is : ', len(s))
```

```
In [ ]: #This program demonstrates strings and functions
        s="I simply love programming in Python"
        #s=input('Please input a first string : ')
        t=input('Please input a second string : ')

        print(s*3)
        print('The combination is ',s.join(t))
```

```
In [ ]: #strings and sub-strings
        s=input('Please input a string : ')
        #myletter=input('Please input the letter you need to find in the string : ')
        n=len(s)
        t=s.count('a', 0, n) + s.count('A', 0, n)
        print('The count is : %d' %(t))
```

```
In [ ]: n=input('Enter the province and the country separated by a space : ')
        k=n.partition(' ')
        print('The location after interchanging province and the country:', k[2], k
        [0])
```

```
In [ ]: #determine whether a substring exists in a string
        #input
        sString=input('enter the string : ')
        sSub=input('enter the substring : ')
        #process and output
        if (sSub in sString):
            print('the substring', sSub,' is found in string', sString)
        else:
            print('the substring', sSub,' is not found in string', sString)
```

```
In [ ]: #determine whether a substring exists in a string
        #input
        sString=input('enter the string : ')
        sSub=input('enter the substring : ')
        #process and output
        rResult=sString.find(sSub)
        if rResult ==-1:
            print('the substring', sSub,' is not found in string', sString)
        else:
            print('the substring', sSub,' is found in string', sString)
```

```
In [ ]:  #Numerical ARRAYS
         print('enter the 4 assignment results (%)')
         #initialize the array
         nAssign=[0 for i in range(4)]
         #array input values
         for iCount in range (4):
             nAssign[iCount]=int(input('Enter mark : '))
         print('Numbers in the array nAssign', nAssign)
         for n in nAssign:
             print(n)
```

```
In [ ]:  #Lists - collect of elements
         sNames=['Jack', 'Jill','Mary', 'Mark']
         print(sNames[0])
         print(sNames[-1])
```

```
In [ ]:  #Lists - collect of elements
         sNames=['Able', 'Brad','Craig', 'Dotty']
         print(sNames[0])
         print(sNames[-1])
         for i in range (0,len(sNames)):
             print(sNames[i])
```

```
In [ ]:  #create a list of the months in the year
         #enter a month number and return the name of the month
```

```
In [ ]:  #create a list of your modules
         #the user must provide input on the name of the module, output must be confirm
         ation of the module code in your list.
```

```
In [ ]:  #enter the headlines from the morning newspaper
         #apply the string functions min max len upper lower title and swapcase to the
         string
         #provide output for each function.
```