**Asignment**

**Q1.**Write a Python program to convert temperatures to and from celsius, fahrenheit.   
[ Formula : c/5 = f-32/9 [ where c = temperature in celsius and f = temperature in fahrenheit ]

Q2. Write a Python program to construct the following pattern, using a nested for loop.

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\* \*   
\* \* \*   
\* \* \* \*   
\* \* \* \* \*   
\* \* \* \*   
\* \* \*   
\* \*   
\*

Q3. Write a Python program to get the Fibonacci series between 0 to 50.

**Q4.** Write a Python program which takes two digits m (row) and n (column) as input and generates a two-dimensional array. The element value in the i-th row and j-th column of the array should be i\*j.

**Q5.** Write a Python program which accepts a sequence of comma separated 4 digit binary numbers as its input and print the numbers that are divisible by 5 in a comma separated sequence. [Go to the editor](https://www.w3resource.com/python-exercises/python-conditional-statements-and-loop-exercises.php#EDITOR)  
Sample Data : 0100,0011,1010,1001,1100,1001  
Expected Output : 1010

**Q6.** Write a Python program that accepts a string and calculate the number of digits and letters.

l=[]

l.append(input("first no"))

l.append(input("first no"))

l.append(input("first no"))

print(l)

for i in range(0,3):

for j in range(0,3):

for k in range(0,3):

if i!=j and j != k and k !=i:

print(l[i], l[j], l[k])

**Q9.**Write a Python program to check the validity of password input by users.   
Validation :

Regular expression

“[0-9]”

* At least 1 letter between [a-z] and 1 letter between [A-Z].
* At least 1 number between [0-9].
* At least 1 character from [$#@].
* Minimum length 6 characters.
* Maximum length 16 characters.

**Q10.**Write a Python program to find numbers between 100 and 400 (both included) where each digit of a number is an even number. The numbers obtained should be printed in a comma-separated sequence.

“100”

For i in range(100,401):

s=str[i]

If (int (s[0])%2==0) and ( int(s[1]%2==0 ) and (s[2]%==0)

**Q11.** Write a Python program to check whether an alphabet is a vowel or consonant.

**Q12.** Write a Python program to convert month name to a number of days

**Q13.** Write a Python program to check a triangle is equilateral, isosceles or scalene.    
Note :  
An equilateral triangle is a triangle in which all three sides are equal.  
A scalene triangle is a triangle that has three unequal sides.  
An isosceles triangle is a triangle with (at least) two equal sides.

**Q14.** Write a Python program to get next day of a given date.

**Q15.** Write a Python program to create the multiplication table of a number.

**Q16.** Write a Python program to construct the following pattern, using a nested loop number.   
Expected Output:

1

22

333

4444

55555

666666

7777777

88888888

999999999