

Assignment

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.

```
*
* *
* * *
* * * *
* * * * *
* * * *
* * *
* *
*
*
```

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](#)

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.

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

Validation :

- 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.

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
```