CnD Test

1. Write a Python program to print the following string in a specific format (see the output).

Sample String : "Twinkle, twinkle, little star, How I wonder what you are! Up above the world so high, Like a diamond in the sky. Twinkle, twinkle, little star, How I wonder what you are"

Output :

```
Twinkle, twinkle, little star,
  How I wonder what you are!
    Up above the world so high,
    Like a diamond in the sky.
Twinkle, twinkle, little star,
  How I wonder what you are
```

2. Write a Python program to add two objects if both objects are integers.
2. Write a Python program to sum three given integers. However, if two values are equal, the sum will be zero.

4. Write a Python program to solve (x + y) * (x + y).

   Test Data: x = 4, y = 3

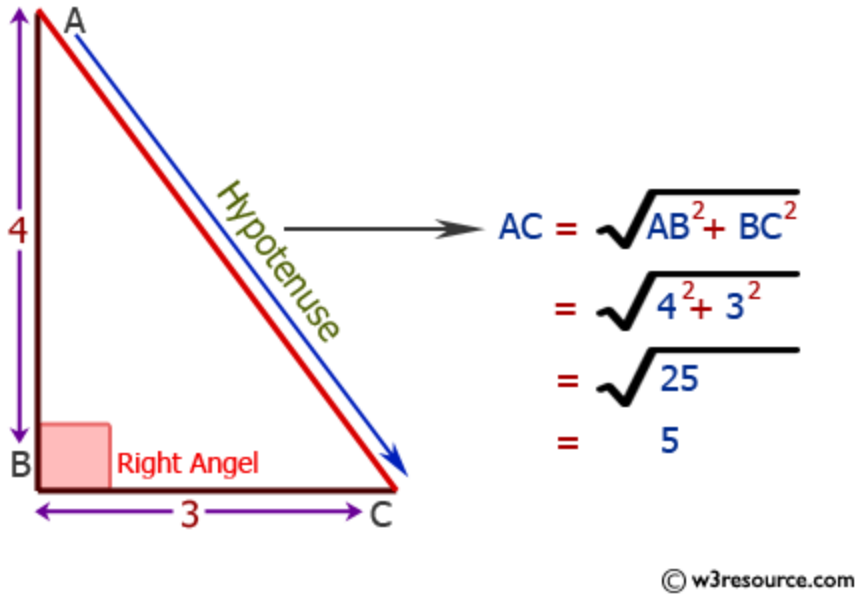
   Expected Output: (4 + 3) ^ 2) = 49

5. Write a Python program to calculate the distance between the points (x1, y1) and (x2, y2).
6. Write a Python program using loop to print '*' to print n time without a newline, connected by '-' hyphens.

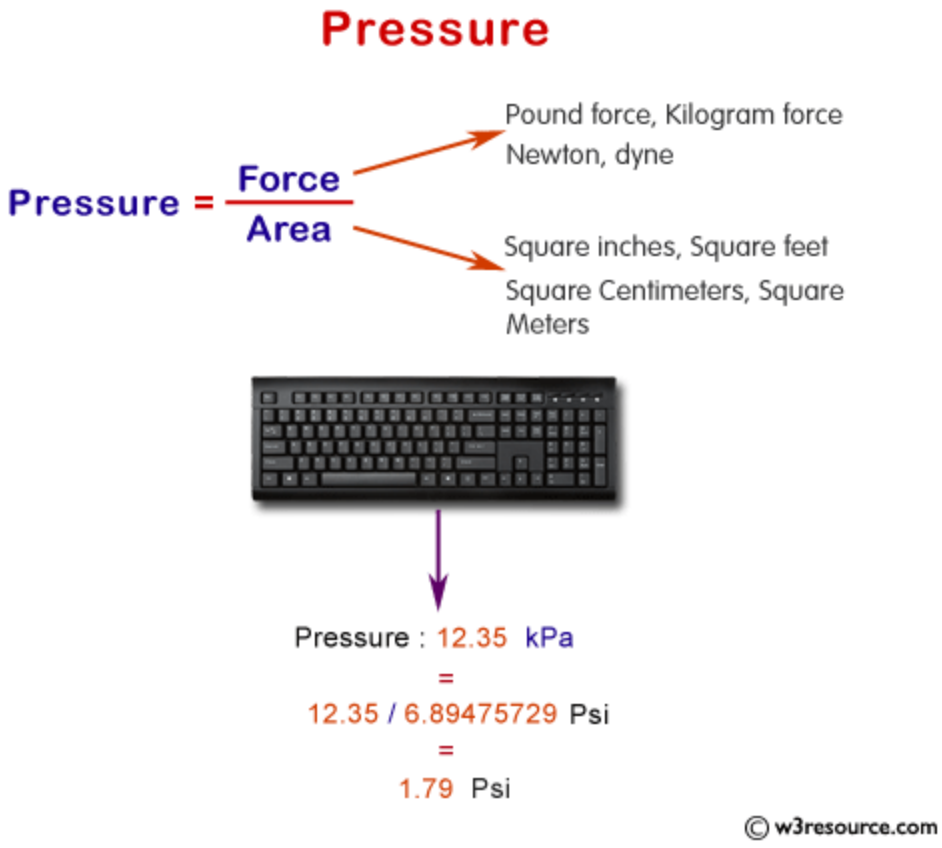
   Test Data: n=10

   Expected Output: *-*-*-*-*-*-*-*-*-*

7. Write a Python program to calculate the hypotenuse of a right angled triangle.Both Base and Height will be provided by user.



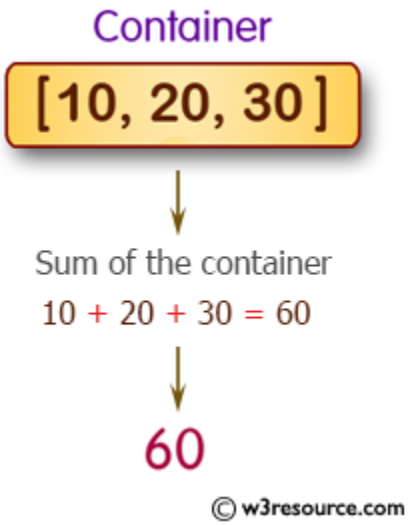
8. Write a Python program to convert pressure in kilopascals to pounds per square inch,a millimeter of mercury (mmHg) and atmosphere pressure.



9. Write a Python program to calculate the midpoints of a line.
10. Write a Python program to sort three integers without using conditional statements and loops.
11. Write a Python program to get the details of the math module.
12. Write a Python program to calculate the sum of all items of a list provided by user

    Sample: n=3 → list(n)=10 20 30

    output: 60



13. Write a Python program to count the number of strings from a given list of strings if the string length is 2 or more and the first and last characters are the same.

Sample List : ['abc', 'xyz', 'aba', '1221']

Expected Result : 2

14. Write a Python program to get a list, sorted in increasing order by the last element in each tuple from a given list of non-empty tuples.

    Sample List : [(2, 5), (1, 2), (4, 4), (2, 3), (2, 1)]

    Expected Result : [(2, 1), (1, 2), (2, 3), (4, 4), (2, 5)]

15. Write a Python program to select an item randomly from a list provided.

    color_list = ['Red', 'Blue', 'Green', 'White', 'Black']

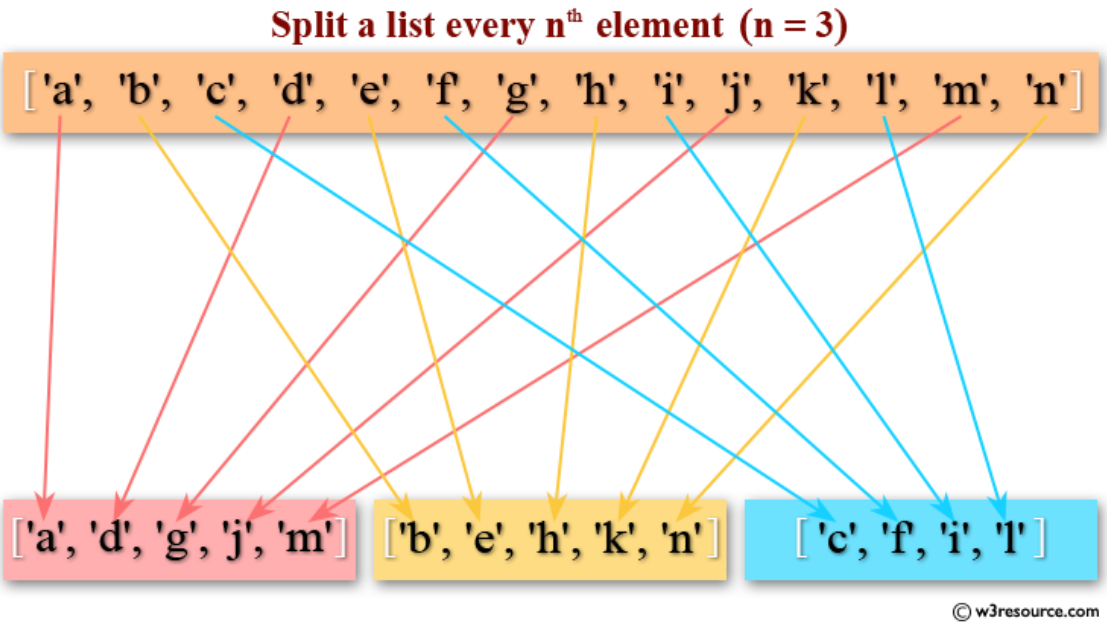
16. Write a Python program to get unique values from a list.

    my_list = [10, 20, 30, 40, 20, 50, 60, 40]

17. Write a Python program to split a list every Nth element.

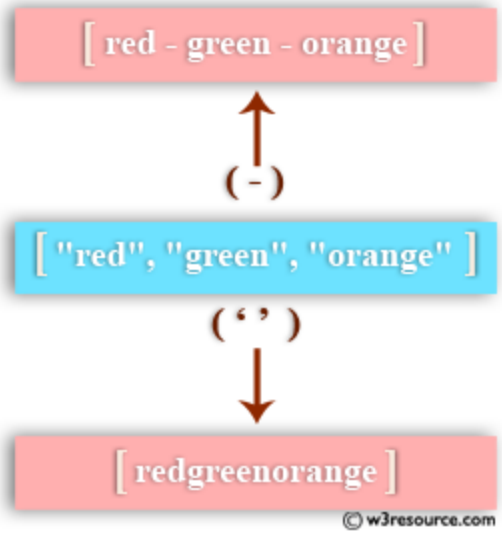
    Sample list: ['a', 'b', 'c', 'd', 'e', 'f', 'g', 'h', 'i', 'j', 'k', 'l', 'm', 'n']

    Expected Output: [['a', 'd', 'g', 'j', 'm'], ['b', 'e', 'h', 'k', 'n'], ['c', 'f', 'i', 'l']]



18. Write a Python program to concatenate elements of the given list.

    color_list = ['red', 'green', 'orange']



19. Write a Python program to insert a given string at the beginning of all items in a list.

    Sample list : [1,2,3,4], string : emp

    Expected output : ['emp1', 'emp2', 'emp3', 'emp4']

20. Write a Python program to find items starting with a specific character from a list.

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Original list:
['abcd', 'abc', 'bcd', 'bkie', 'cder', 'cdsw', 'sdfsd', 'dagfa', 'acjd']

Items start with a from the said list:
['abcd', 'abc', 'acjd']

Items start with d from the said list:
['dagfa']

Items start with w from the said list:
[]
```