1. Consider a list whose elements are 1..10, iterate this list and display the output as follows,

(' 1', ' 1', ' 1')

(' 2', ' 4', ' 8')

(' 3', ' 9', ' 27')

(' 4', ' 16', ' 64')

(' 5', ' 25', '125')

(' 6', ' 36', '216')

(' 7', ' 49', '343')

(' 8', ' 64', '512')

(' 9', ' 81', '729')

('10', '100', '1000')

1. Create a pyramid with stars. Get the input number from user. Say user enters “9”. Then It must display like below..

\*

\*\*\*

\*\*\*\*\*

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

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

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

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

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

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

1. Write a Python program which accepts the radius of a circle from the user and compute the area. (think what is the Area of the circle formula)
2. Write a Python program which accepts the user's first and last name and print them in reverse order with a space between them.
   1. Example: if user enters “Sanjay” as First name and “Pradeep” as Last name, the output should be “Pradeep Sanjay”
3. Write a Python program to display the first and last colors from the following list. Go to the editor color\_list = ["Red","Green","White" ,"Black"]
4. Write a Python program that accepts an integer (n) and computes the value of n+nn+nnn+nnnn..
   1. Sample value of n is 5
   2. Expected Result : 615
5. Write a Python program to get the volume of a sphere with radius 6.
6. Write a Python program to get the difference between a given number and 17, if the number is greater than 17 return double the absolute difference
7. Write a Python program to test whether a number is within 100 of 1000 or 2000.
8. Write a Python program to calculate the sum of three given numbers, if the values are equal then return thrice of their sum.
9. Write a Python program to get a new string from a given string where "Is" has been added to the front. If the given string already begins with "Is" then return the string unchanged.
10. Write a Python program to get a string which is n (non-negative integer) copies of a given string
11. Write a Python program to test whether a passed letter is a vowel or not.
12. Write a Python program to concatenate all elements in a list into a string and return it.
13. Write a Python program to print all even numbers from a given numbers list in the same order and stop the printing if any numbers that come after 237 in the sequence
14. Write a Python program to print all even numbers from a given numbers list in the same order and stop the printing if any numbers that come after 237 in the sequence.

numbers = [ 386, 462, 47, 418, 907, 344, 236, 375, 823, 566, 597, 978, 328, 615, 953, 345, 399, 162, 758, 219, 918, 237, 412, 566, 826, 248, 866, 950, 626, 949, 687, 217, 815, 67, 104, 58, 512, 24, 892, 894, 767, 553, 81, 379, 843, 831, 445, 742, 717, 958,743, 527 ]

1. Write a Python program to print out a set containing all the colors from color\_list\_1 which are not present in color\_list\_2
   1. Test Data:   
      color\_list\_1 = set(["White", "Black", "Red"])   
      color\_list\_2 = set(["Red", "Green"])  
      Expected Output:   
      {'Black', 'White'}
2. Write a Python program that will accept the base and height of a triangle and compute the area.
3. Write a Python program to compute the greatest common divisor (GCD) of two positive integers.
4. Write a Python program to get the least common multiple (LCM) of two positive integers.
5. Write a Python program to sum of two given integers. However, if the sum is between 15 to 20 it will return 20.
6. Write a Python program to sum of three given integers. However, if two values are equal sum will be zero.
7. Write a Python program to compute the future value of a specified principal amount, rate of interest, and a number of years.
   1. amt = 10000, int = 3.5, years = 7 Expected Output : 12722.
8. Write a Python program to check whether a file exists
9. Write a Python program to determine if a Python shell is executing in 32bit or 64bit mode on OS.
10. Write a Python program to get OS name, platform and release information.
11. Write a Python program to check if a string is numeric.
12. Write a Python program to check if a number is positive, negative or zero.
13. Write a Python program to get numbers divisible by fifteen from a list using an anonymous function.
14. Write a Python program to filter the positive numbers from a list
15. Write a Python program to compute the product of a list of integers (without using for loop)

# *Dictionary*

1. Write a Python script to sort (ascending and descending) a dictionary by value.
2. Write a Python script to generate and print a dictionary that contains a number (between 1 and n) in the form (x, x\*x)
3. Sample Dictionary ( n = 5) : Expected Output : {1: 1, 2: 4, 3: 9, 4: 16, 5: 25}
4. Write a Python script to print a dictionary where the keys are numbers between 1 and 15 (both included) and the values are square of keys.   
   Sample Dictionary   
   {1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100, 11: 121, 12: 144, 13: 169, 14: 196, 15: 225}
5. Write a Python program to sum all the VALUES in a dictionary
6. Write a Python program to multiply all the items in a dictionary
7. Write a Python program to remove a key from a dictionary.
8. Write a Python program to map two lists into a dictionary
9. Write a Python program to sort a dictionary by key.
10. Write a Python program to get the maximum and minimum value in a dictionary
11. Write a Python program to check a dictionary is empty or not.
12. Iterate the dictionary
13. Double the value of the dictionary through iteration