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## Functions in Python

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1. Write a Python function that accepts a string and calculate the number of upper case letters and lower case letters.

Sample String: 'Data Science pRogram By YaMUna'

Expected Output:

No. of Upper case characters: 7 No. of Lower case Characters: 18

2. Write a Python program to print the even numbers from a given list.

Sample List: [1, 2, 3, 4, 5, 6, 7, 8, 9] Expected Result: [2, 4, 6, 8]

3. Write a Python function to check whether a number is perfect or not.

A Perfect number is a number that is half the sum of all of its positive divisors (including itself).

Example:

The first perfect number is 6, because 1, 2, and 3 are its proper positive divisors, and 1 + 2 + 3 = 6.

Equivalently, the number 6 is equal to half the sum of all its positive divisors: (1 + 2 + 3 + 6)/2 = 6.

The next perfect number is 28 = 1 + 2 + 4 + 7 + 14. This is followed by the perfect numbers 496 and 8128.

4. Write a Python function that takes a list and returns a new list with unique elements of the first list.

Input:

[1,2,3,3,3,3,4,5]

Output:

[1, 2, 3, 4, 5]

5. Write a Python function to concatenate any no of dictionaries to create a new one.

Sample Dictionary :

dic1={1:10, 2:20}

dic2={3:30, 4:40}

dic3={5:50,6:60}

Expected Result: {1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}