

# Python Programming

*Day 9: Classes and Objects*

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## *Tutorials*

# Exercise 1:

Write a Python class to find validity of a string of parentheses, '(', ')', '{', '}', '[' and ']'. These brackets must be close in the correct order, for example "()" and "()[{}]" are valid but "[", "{[D]" and "{{{" are invalid.

## Exercise 2:

Write a Python class to get all possible unique subsets from a set of distinct integers.

## Exercise 3:

Write a Python class to find a pair of elements (indices of the two numbers) from a given array whose sum equals a specific target number.

Input: numbers= [10,20,10,40,50,60,70], target=50

Output: 3, 4



## Exercise 4:

Write a Python class to find the three elements that sum to zero from a set of  $n$  real numbers.

Input array : [-25, -10, -7, -3, 2, 4, 8, 10]

Output : [[-10, 2, 8], [-7, -3, 10]]

## Exercise 5:

Write a Python class to implement `pow(x, n)`

## Exercise 6:

Write a Python class to reverse a string word by word.

Input string : 'hello .py'

Expected Output : '.py hello'





*Next Lecture ...*



*Day 10: Classes and Objects (2)*