PYTHON CLASSES EXERCISES

1.  Write a Python class named Student with two attributes student\_id, student\_name. Add a new attribute student\_class and display the entire attribute and their values of the said class. Now remove the student\_name attribute and display the entire attribute with values

2. Write a Python class named Student with two attributes student\_id, student\_name. Add a new attribute student\_class. Create a function to display the entire attribute and their values in Student class.

3. Write a Python class named Student with two instances student1, student2 and assign given values to the said instances attributes. Print all the attributes of student1, student2 instances with their values in the given format.

4. 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 "[)", "({[)]" and "{{{" are invalid.

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

Input : [4, 5, 6]  
Output : [[], [6], [5], [5, 6], [4], [4, 6], [4, 5], [4, 5, 6]]

6. Write a Python class which has two methods get\_String and print\_String. get\_String accepts a string from the user and print\_String prints the string in upper case

7. Write a Python class named Rectangle constructed by a length and width and a method which will compute the area of a rectangle.

8.Write a python program to find area of triangle using method overloading concept

9 Demonstrate Python's overloading concepts using len() function . Assume you have a purchase class, create a list using constructor and using length function find the length of the list passed during object creation.

10. Demonstrate python \_\_mul\_\_ operator overloading

11. Design a calculator using suitable python concepts (Expected to use class, functions, method and operator overloading)