

## Assignment # 8

1. Write Define a class which has at least two methods:  
getString: to get a string from console input  
printString: to print the string in upper case.
2. 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]]
3. Define a class named Circle which can be constructed by a radius. The Circle class has a method which can compute the area.
4. Define a class named Rectangle which can be constructed by a length and width. The Rectangle class has a method which can compute the area.
5. Define a class with a generator which can iterate the numbers, which are divisible by 7, between a given range 0 and n.
6. Define a class named Shape and its subclass Square. The Square class has an init function which takes a length as argument. Both classes have a area function which can print the area of the shape where Shape's area is 0 by default.
7. Derive class **Contact** from the base classes **Person** and **Address** and use their methods to print out the contact information.
8. Write a Python class to convert an integer to a roman numeral.
9. Write a Python class to convert a roman numeral to an integer.