**Tutorial 12**

**CSE101: Introduction to Programming**

1. You are helping a college keep track of its professors and students. Implement Python classes ‘Student’ and ‘Professor’ with an appropriate instance variable Roll Number/Employee ID. Associate a class variable with each of the classes to keep track of the number of students/professors the college has. Take user inputs x and y as the cost each student and professor incurs for the college. Create multiple objects of the two classes and finally print the total cost the college will incur using the class variables created.

1. Create a class for Quadratic Polynomials QP with variables to store its coefficients. Add functions to the class that allow the user to modify a given polynomial’s three coefficients. Add another function that prints the polynomial in the form ‘ax^2 + bx + c’.

**Optional**: Make a function in the class QP that takes another QP object as a parameter, adds it to the object and returns the sum of the two polynomials as a new QP object.