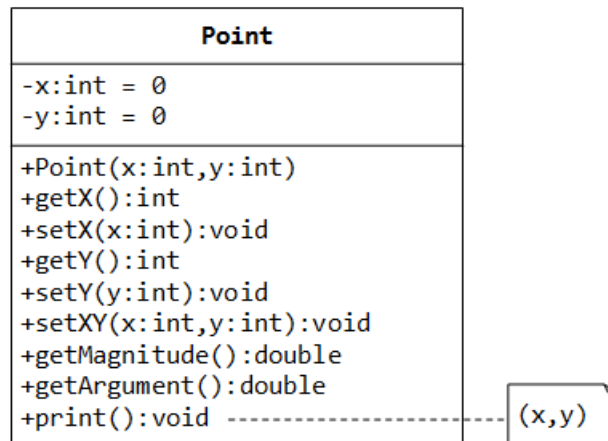# Object Oriented Programming
Lab Assignment– 7

Operator overloading with Point class.

The Point class, as shown in the class diagram above, models 2D points with x and y co-ordinates. In the class diagram, "-" denotes private member; "+" denotes public member. "= xxx" specifies the default value of a data member.

The Point class should contain the followings:

- Private data members x and y (of type int), with default values of 0.
- A constructor, getters and setters for private data member x and y.
- A function setXY() to set both x and y coordinates of a Point.
- A function print() which prints "(x,y)" of this instance.
- Ignore getMagnitude() and getArgument() member functions for now.
- Overload the + operator via a member function operator+(), which shall add this instance (left operand) with the rhs operand. The function should return a new Point object with the sums of x's and y's.
- Declared the member function as const, so that it cannot modify data members.

Example;

```
Point p1(1,2);
Point p2(4,5);

Point p3 = p1 + p2; // (5,7)

Point p5 = p1 + p2 + p3 + p4; // (?,?)
```