

## **Practice Assignment 8**

Save all the solutions as per question number. Make a zip folder of all the solutions and upload in Moodle.

1. Consider the function `find-intersection(m1,c1,m2,c2)` in `Intersection.java`. The program computes the intersection point of two straight lines and displays the result. It reads two integer pairs  $(m1, c1)$  and  $(m2, c2)$  defining the two straight lines of the form  $y=mx + c$ .

Create test cases for this program using equivalent class partitions and execute them.

**50 Points**

2. Consider the `Quadric_Equation.java` file. It determines the nature of roots of a quadratic equation. Its input are positive integers (say  $a, b, c$ ) and values may be from interval  $[0, 200]$ . The program output may have one of the following words.

☐ Not a quadratic equation

☐ Real roots

☐ Imaginary roots

☐ Equal roots.

Test the `calculatoroot()` using Equivalence Class Partition and Boundary Value Analysis. **50 Points**