**#H24121133 統計一 陳星宇**

**Problem 1-1. Show the result of evaluating each expression. Be sure that the value is in the proper form to indicate its type (int, or float). If the expression is illegal, explain why.**

(a) 4.0 / 10.0 + 3.5 \* 2 ANS:7.4

(b) 10 % 4 + 6 / 2 ANS:5.0

(c) (6.5 - 5.0) \*\* (0.5) + 7 \* 3 ANS: 22.22474487139159

(d) 3 \* 10 / 3 + 10 % 3 ANS:11.0

(e) 5 / (1 // 2) ANS:illegal 不能除以0

**Problem 1-2. What is the exact result of each of the following when evaluated?**

(a) 12 / 6.0 ANS:2.0

(b) 21 // 10 ANS:2

(c) 25 // 10.0 ANS:2.0

(d) 12 / 6 ANS:2.0

**Problem 1-3. Given a quadratic equation,**

**What are the problems with the following program?**

q = b\*b - 4\*a\*c

q\_sr = q \*\* (1//2) ANS:q\_sr = q \*\* (0.5)

x1 = (-b + q\_sr)/2\*a ANS: (-b + q\_sr)/(2\*a)

x2 = (-b - q\_sr)/2\*a ANS: (-b - q\_sr)/(2\*a)

print("x1,' x1, "x2=" x2) ANS: print("x1=",x1,"x2=",x2)

Modify the program so that it can output the correct x1 and x2 by solving the given equation