

Problem #1 (10 marks)

Given 4 integers write a program to find the maximum of the integers. **You cannot use nested if-else or switch-case and logical connectors.**

Sample Input(s)	Corresponding Output(s)
1 2 3 4	4
4 3 2 1	4
1 5 4 2	5

Problem #2 (10 marks)

Write a program to determine whether a triangle is a right triangle or right isosceles triangle or isosceles triangle. As input, take six real numbers $x_1, y_1, x_2, y_2, x_3, y_3$. Each x_i and y_i correspond to the x and y coordinate of a point respectively. If the given points cannot form a valid triangle you need to print "Invalid triangle."

Sample Input(s)	Corresponding Output(s)
0 0 0 4 1 0	Right Triangle
0 0 0 2 2 0	Right Isosceles Triangle
0 0 1 -1 1 1	Isosceles Triangle
0 0 0 4 0 5	Invalid Triangle