



# Practice Arena

Practice problems aimed to improve your coding skills.

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  - ❓ Ms- Mathematica
  - ❓ Pollution Problem
  - ❓ In or Out
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- 📁 LAB-PRAC-14\_SORT-MISC

# In or Out

## LAB-PRAC-04\_COND

**In or Out [10 marks]**

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**Problem Statement**

You will be given the 2D coordinates of the center of a circle and its radius in a format given below. You will also be given the 2D coordinates of another point. You have to print "In" (without quotes) if the point is inside the boundary of the circle, "On" (without quotes) if the point is on the boundary of the circle, and "Out" (without quotes) if the point is outside the boundary of the circle. All coordinates and radii will be **integers**.

**Caution**

1. Be careful about extra/missing lines and extra/missing spaces.
  2. Be careful that although the coordinates can be stored as int variables, your calculations may involve values that are too large for the int variable. Take care and use appropriate datatypes.
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**INPUT:**

(xcenter, ycenter), r = radius  
(x, y)

**OUTPUT:**

Label (In/On/Out)

**EXAMPLE:****INPUT**

(7, 6), r = 4  
(3, 3)

**OUTPUT:**

Out

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**Grading Scheme:**

Total marks: **[10 Points]**

There will be no partial grading in this question. An exact match will receive full marks whereas an incomplete match will receive 0 points. Please be careful of missing/extra spaces and missing/lines (take help of visible test cases). Each visible test case is worth 1 point and each hidden test case is worth 2 points. There are 2 visible and 4 hidden test cases.

 **Start Solving!** (/editor/practice/6053)