

# [CS 11] Prac 0b – Darts

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[oj.dcs.upd.edu.ph/problem/cs11prac0b](https://oj.dcs.upd.edu.ph/problem/cs11prac0b)

## Problem Statement

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Steve is learning how to play darts! He cannot consistently hit the dartboard yet, but he will someday, with enough **practice**.

In Steve's world, the dartboard is an **axis-aligned rectangle**, that is, a rectangle each of whose sides is parallel to either the x-axis or y-axis.

The dartboard can be represented as the axis-aligned rectangle in the 2D Cartesian plane whose bottomleft corner has coordinates  $(x_1, y_1)$   $(x_1, y_1)$  and topright corner has coordinates  $(x_2, y_2)$   $(x_2, y_2)$ .

Steve's dart landed on the point with coordinates  $(x, y)$   $(x, y)$ .

Did Steve's dart land inside the dartboard?

Assume that the dart is a point, and that the boundary of the rectangle counts as being *inside* the rectangle.

## Task Details

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Your task is to implement a function called **dart\_landed**. This function has six parameters **x1**, **y1**, **x2**, **y2**, **x** and **y** in that order, all **ints**, whose meanings are described in the problem statement. In particular, your function will be declared as follows:

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```
def dart_landed(x1, y1, x2, y2, x, y):
```

The function must return a **bool**. It must return **True** if Steve's dart landed inside the rectangle, and **False** otherwise.

Do **not** print anything on screen.

## Example Calls

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Example 1 Function Call

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```
dart_landed(-20, -10, 20, 10, 0, 0)
```

**Example 1 Return Value**

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```
True
```

**Example 2 Function Call**

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```
dart_landed(-20, -10, 20, 10, 500, 0)
```

**Example 2 Return Value**

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```
False
```

**Constraints**

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When the program is run:

- The function `dart_landed` will be called at most 100100 times.
- In each function call, each argument will have an absolute value at most  $10^{20}$ .
- It is guaranteed that  $x_1 < x_2$  and  $y_1 < y_2$ .

**Scoring**

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You get 100100 ❤️ points if you solve all test cases correctly.

[Report an issue](#)

**Clarifications**

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No clarifications have been made at this time.