

## DESIGN RECIPE

**Word Problem: collide?**

Write a function collide?, which takes FOUR inputs:

- ❑ *px: The x-coordinate of the player*
- ❑ *py: The y-coordinate of the player*
- ❑ *cx: The x-coordinate of another game character*
- ❑ *cy: The y-coordinate of another game character*

It should return `true` if the coordinates of the player are within 50 **pixels** of the coordinates of the other character. Otherwise, `false`.

## I. Contract+Purpose Statement

$$; \text{ name} : \text{ Domain} \rightarrow \text{Range}$$

What does the function do?

## II. Give Examples

(EXAMPLE ( \_\_\_\_\_ )  
Use the function here

\_\_\_\_\_ )  
find another way to get the same result here

(EXAMPLE ( \_\_\_\_\_ )  
Use the function here...

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find another way to get the same result here

### III. Definition

```
(define ( function name variable names )
```

\_\_\_\_\_)