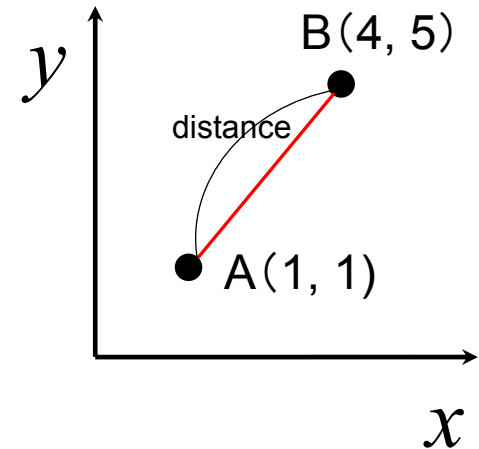


# Exercise 5-4 struct\_point.c

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- Create a program struct\_point.c that finds the distance between two points in a two-dimensional plane.
  - For the coordinates of a certain point, define a structure Point having  $x$  and  $y$  coordinates as members, and use it for distance calculation.
  - Use double type coordinates
  - The square root uses the mathematical function sqrt ()
  - The square can be " $x * x$ " or " $\text{pow}(x, 2)$ " using the mathematical function pow ().
  - Coordinates are assigned directly in the main function. You may substitute (1.0, 1.0), (4.0, 5.0) at the time of declaration.



For mathematical functions  
#include <math.h>  
is necessary  
(-lm for compilation)

Example of declaration: `struct Point a = {1.0, 1.0};`  
`struct Point b = {5.0, 4.0};`

- Display the two coordinate values and the distance in the output.

Display example

```
a = (1.000000, 1.000000)
b = (5.000000, 4.000000)
distance = 5.000000
```