Problem Secret Point

C header: secret_point.h
C++ header: secret_point.h

The Scientific Committee hid a point in the 2D plane. Let's name it P. Your task is to find it. In your endeavour, you can ask what is the Euclidean distance between P and another point of your choice in the 2D plane.

Interaction protocol

The problem is interactive!

The contestant must implement the following function:

```
void find_secret_point();
```

This function will be called exactly once by the grader program, and will attempt to find point P. The function may call the following auxiliary function, provided by the grader program:

```
double get_distance(double x, double y);
```

This function returns the distance between point P and the point with coordinates (x, y).

When the contestant is confident they found P, this has to be reported by calling the following function supplied by the grader:

```
void the_secret_point_is(double x, double y);
```

In order for the answer to be considered correct, the distance between the hidden point P and the guessed point must be at most 10^{-6}.

Constraints

- The constraints over the hidden point P are: $-1\ 000 \leq x, y \leq 1\ 000$
- The constraints over the points chosen by the contestant are: $-10\ 000 \leq x, y \leq 10\ 000$

Example Interaction

hidden data	called functions
P = (1, 1)	get_distance(1, 0) = 1 get_distance(0, 1) = 1 get_distance(2, 2) = 1.414213562373... the_secret_point_is(1, 1)