To solve this exercise you will need the definition of Point and distance() of problem P46254.

Write a procedure

```cpp
void move(Point& p1, const Point& p2);
```

that moves the point p1 according to the coordinates indicated by the point p2.

For instance, being p1 the point (2, 1), and p2 the point (−0.5, 4). Then move(p1, p2) would do that p1 was (1.5, 5).

Additionally, using the definition

```cpp
struct Circle {
    Point center;
    double radius;
};
```

write two procedures,

```cpp
void scale(Circle& c, double sca);
```

that scales the circle c proportionately to the real strictly positive sca, and

```cpp
void move(Circle& c, const Point& p);
```

that moves the circle c according to the coordinates indicated by p.

For instance, being c a circle of center (1, 2) and radius 3. Then, scale(c, 2) would obtain a circle of center (1, 2) and radius 6. However, if p is (3.5, −1), move(c, p) would obtain a circle of center (4.5, 1) and radius 3.

Write also a function that prints if a point p is inside a circle c:

```cpp
bool is_inside(const Point& p, const Circle& c);
```

Suppose that the radii are always strictly positive, and that p will never be exactly in the border of c.

**Observation**

You only need to submit the required classes; your main program will be ignored. Strictly obey the type definitions of the statement.

**Problem information**

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