# 478. Generate Random Point in a Circle

Given the radius and the position of the center of a circle, implement the function randPoint which generates a uniform random point inside the circle.

***Implement the Solution class:***

- Solution(double radius, double x_center, double y_center) initializes the object with the radius of the circle radius and the position of the center (x_center, y_center).
- randPoint() returns a random point inside the circle. A point on the circumference of the circle is considered to be in the circle. The answer is returned as an array [x, y].

## Example 1:

- **Input**

  ["Solution", "randPoint", "randPoint", "randPoint"]

  [[1.0, 0.0, 0.0], [], [], []]

- **Output**

  [null, [-0.02493, -0.38077], [0.82314, 0.38945], [0.36572, 0.17248]]

- **Explanation**

  Solution solution = new Solution(1.0, 0.0, 0.0);

  solution.randPoint(); // return [-0.02493, -0.38077]

  solution.randPoint(); // return [0.82314, 0.38945]

  solution.randPoint(); // return [0.36572, 0.17248]

## Constraints:

- $0 < radius <= 10^8$
- $-10^7 <= x\_center, y\_center <= 10^7$
- At most $3 * 10^4$ calls will be made to randPoint.