

478. Generate Random Point in a Circle

Description

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:

- $0 < \text{radius} \leq 10^8$
- $-10^7 \leq x_center, y_center \leq 10^7$
- At most $3 * 10^4$ calls will be made to `randPoint`.

