# Amplitude Hackathon Winter '24 Problem 1 - Twila's Walk

**Time limit:** 0.25s **Memory limit:** 1G

For those not in the know, Twila is one of the many #doggosofamplitude that you might see in a Dr. Pepper costume.

Jessica is taking Twila out for an afternoon walk! For today's walk, Jessica has planned a walk that is x miles long.

Twila prefers longer walks to shorter walks - when her walk is y miles long, she gains  $y^2$  units of happiness.

How many units of happiness will Twila gain on today's walk?

#### **Constraints**

 $1 \le x \le 10$ 

#### **Input Specification**

The first and only line of input contains a positive integer x.

#### **Output Specification**

Output the number of units of happiness Twila gains on the walk.

#### Sample Input 1

1

#### **Sample Output 1**

1

#### **Sample Explanation 1**

If Twila walks for 1 mile, she gains  $1^2 = 1$  unit of happiness.

### Sample Input 2

## **Sample Output 2**

100

## **Sample Explanation 2**

If Twila walks for 10 miles, she gains  $10^2 = 100$  units of happiness.