

Homework-1

Let x be an integer, and $R(x)$ is a function that returns the reverse of the x in terms of its digits. For example, if $x:1234$ then $R(x)=4321$. Let's call a positive integer **mirror-friendly** if it satisfies the following condition:

$$x + R(x) = y^2 \text{ where } y \text{ is an integer}$$

Write a program that reads a positive integer as n from the user and prints out a line for each of the first n mirror-friendly integers as follows:

$$x + R(x) = y^2$$

Note that you should print the values of x , y , and $R(x)$. (See the example below)

Example:

If the user enters 5 as n , then the program should print out the following:

$$2 + 2 = 2^2$$

$$8 + 8 = 4^2$$

$$29 + 92 = 11^2$$

$$38 + 83 = 11^2$$

$$47 + 74 = 11^2$$