Control Statements - Kaprekar number

Jaffer wanted to excel in Math. He was learning about the Kaprekar number from Meena, his Maths teacher. She gave him a few random numbers and asked him to find out whether they are Kaprekar number or not.

(Consider an n-digit number k. Square it and add the right n digits to the left n or n-1 digits. If the resultant sum is k, then k is called a Kaprekar number. For example, 9 is a Kaprekar number since 9^2 = 81 & 8 + 1 = 9, similarly, 297 is a Kaprekar number as 297^2 = 88209 & 88 + 209 = 297).

Can you help Jaffer to write a program to find whether the given number is a Kaprekar number or not?

Input Format

Input consists of a single integer.

Constraints

NA

Output Format

If the output is a Kaprekar number print "Kaprekar Number" else "Not a Kaprekar Number".

Sample Input 0

```
45
```

Sample Output 0

```
Kaprekar Number
```

Sample Input 1

```
23
```

Sample Output 1

```
Not a Kaprekar Number
```

Difficulty: Medium

Rate This Challenge:

More

C

```c
# include <stdio.h>
# include <stdbool.h>
# include <math.h>

bool chkkaprekar(int n)
{
    if (n == 1)
       return true;
    int sqr_n = n * n;
    int ctr_digits = 0;
    while (sqr_n)
    {
        ctr_digits++;
        sqr_n /= 10;
    }
    sqr_n = n*n;
    for (int r_digits=1; r_digits<ctr_digits; r_digits++)
    {
         int eq_parts = pow(10, r_digits);

         if (eq_parts == n)
            continue;
         int sum = sqr_n/eq_parts + sqr_n % eq_parts;
         if (sum == n)
           return true;
    }
    return false;
}
int main()
{
int kpno;
  scanf("%d",&kpno);
          if (chkkaprekar(kpno)==true)
          {
           printf("Kaprekar Number \n");
          }
          else
          {
           printf("Not a Kaprekar Number \n");
          }
}

```

Line: 1 Col: 1

Upload Code as File Test against custom input Run Code Submit Code

Testcase 0 ✔ Testcase 1 ✔

Congratulations, you passed the sample test case.

Click the **Submit Code** button to run your code against all the test cases.

Input (stdin)

```
45
```

Your Output (stdout)

```
Kaprekar Number
```

Expected Output

```
Kaprekar Number
```