

Algorithm

Aim: To print all the Kaprekar numbers within the given range.

1) Start

2) main()- a) Input two numbers p and q as the range

b) String numbers = " ";

int count = 0;

c) for(int i=p ;i<=q; i++)

{

int number = i;

long square = number * number;

double number_of_digits = Double.valueOf((String.valueOf(square)).length());

long right_side = square % (long)Math.pow(10,Math.ceil(number_of_digits/2));

long left_side = square / (long)Math.pow(10,Math.ceil(number_of_digits/2));

if(right_side+left_side == number)

{

numbers += String.valueOf(number)+" ";

count++;

}

}

d) System.out.println("\nTHE KAPREKAR NUMBERS ARE:-

"+numbers.substring(0,numbers.length()-2));

System.out.println("\nFREQUENCY OF KAPREKAR NUMBERS IS: "+count);

3) Stop