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//Problem Statement 1:
//You are provided with a program skeleton that performs a division
operation. However, there is a
//possibility of encountering a DivideByZeroException. Your task is to
complete the program by adding
//the necessary exception-handling code to catch and handle this exception
gracefully.
//Coding:

public class DivideByZeroExample {
   public static void main(String[] args) {
    int numerator = 10;
    int denominator = 0;
    // TODO: Implement exception handling for divide by zero
    try {
        System.out.println("Result: "+ divideNumbers(numerator,
        denominator));
   }catch (ArithmeticException e) {
        System.out.println(e.getMessage());
   }
   private static int divideNumbers(int numerator, int denominator) throws
   ArithmeticException {
        // TODO: Implement exception handling for divide by zero
        return numerator / denominator;
   }
}
```