# Experiment-10

# Code:

Code:

import java.util.InputMismatchException;

import java.util.Scanner;

public class DivideByZeroWithExceptionHandling

{

public static int quotient( int numerator, int denominator ) throws ArithmeticException

{

return numerator / denominator;

}

public static void main( String args[] )

{

Scanner scanner = new Scanner( System.in );

boolean continueLoop = true;

do

{

try

{

System.out.print( "Please enter an integer numerator: " );

int numerator = scanner.nextInt();

System.out.print( "Please enter an integer denominator: " );

int denominator = scanner.nextInt();

int result = quotient( numerator, denominator );

System.out.printf( "\nResult: %d / %d = %d\n", numerator,

denominator, result );

continueLoop = false; // input successful; end looping

}

catch ( InputMismatchException inputMismatchException )

{

System.err.printf( "\nException: %s\n",inputMismatchException );

scanner.nextLine();

System.out.println( "You must enter integers. Please try again.\n" );

}

catch ( ArithmeticException arithmeticException )

{

System.err.printf( "\nException: %s\n", arithmeticException );

System.out.println( "Zero is an invalid denominator. Please try again.\n" );

}

} while ( continueLoop );

}

}