**Discussion Assignment**

Provide a description of the try .. catch statement. As part of your description you must describe how this statement can be used to handle errors and exceptions and include an example of try ... catch implemented to handle an error or exception within a Java program.

A try catch statement is a statement that ‘tries’ to prevent a program from crashing when an invalid value is entered, or some other action that produces an exception, which, in a reductionist sense, can be thought of as an error in a program (although it is not always an error).

In a try catch statement, you enclose the code in question (which might produce the exception), in a try block, immediately followed by a catch block:

try {

(statements or code of interest)

}

catch {

(statements to execute if exception is produced)

}

An example of a try statement is:

class Example1 {

public static void main(String args[]) {

int num1, num2;

try {

  /\* We suspect that this block of statement can throw

\* exception so we handled it by placing these statements

\* inside try and handled the exception in catch block

\*/

num1 = 0;

num2 = 62 / num1;

System.out.println(num2);

System.out.println("Hey I'm at the end of try block");

}

  catch (ArithmeticException e) {

/\* This block will only execute if any Arithmetic exception

\* occurs in try block

\*/

System.out.println("You should not divide a number by zero");

}

catch (Exception e) {

/\* This is a generic Exception handler which means it can handle

\* all the exceptions. This will execute if the exception is not

\* handled by previous catch blocks.

\*/

System.out.println("Exception occurred");

}

System.out.println("I'm out of try-catch block in Java.");

}

}

***Source:***[Singh, Chaitanya. 2013. “Try Catch in Java - Exception Handling.” Beginnersbook.com. April 8, 2013.](http://paperpile.com/b/4nZgMm/bhhB) <https://beginnersbook.com/2013/04/try-catch-in-java/>[.](http://paperpile.com/b/4nZgMm/bhhB)