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Convert and Ada program into Java and change so that all assignments of the Freq[] array are inside of the exception portion of the code.

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 \* Exception Handling in Java

 \* 10/6/20

 \* Java program to test out the functionitly of exception handling

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import java.util.Scanner;

public class Grade {

    public static void main(String[] args) {

        int Freq[] = new int[10];

        int Index, New\_Grade = 0, Limit\_1, Limit\_2;

        Scanner scan = new Scanner(System.in);

        while (true) {

            // take in value

            New\_Grade = scan.nextInt();

            // exit loop if negitive number is inputted

            try {

                if (New\_Grade < 0) {

                    throw new NullPointerException("Stop");

                }

            } catch (Exception e1) {

                break;

            }

            // exception handle to insert in array Freq

            try {

                throw new NullPointerException("Blah");

            } catch (Exception e2) {

                // calculate index

                Index = New\_Grade / 10;

                // insert 100 into array as index equation would make it go beyond size of array

                if (New\_Grade == 100) {

                    Freq[9] = Freq[9] + 1;

                }

                // Print for non-valid numbers and continue

                else if (New\_Grade > 100) {

                    System.out.printf("Error -- new grade: %d is not vaild\n", New\_Grade);

                }

                // store into array

                else {

                    Freq[Index] = Freq[Index] + 1;

                }

            }

        }

        // print frequencies of grades

        System.out.printf("%10s\t%10s\t%10s\n", "Limits Start", "Limits End", "Frequency");

        for (int i = 0; i < Freq.length; i++) {

            // calculate limits

            Limit\_1 = 10 \* i;

            Limit\_2 = Limit\_1 + 9;

            if (i == 9) {

                Limit\_2 = 100;

            }

            System.out.printf("%10d\t%10d\t%10d\n", Limit\_1, Limit\_2, Freq[i]);

        }

    }

}

