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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.

```
/**
 * Jeffrey Lansford
 * Exception Handling in Java
 * 10/6/20
 * Java program to test out the functionitly of exception handling
 */
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 negative 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 valid\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]);
    }
}
}

```

```
jeffrey@MFS-3:/mnt/d/Documents/NMSU/CS471/Program5$ java Grade
```

```
10  
20  
30  
40  
50  
60  
70  
80  
90  
100  
99  
101
```

```
Error -- new grade: 101 is not vaild
```

```
1  
0  
12  
34  
56  
78  
90  
-1
```

Limits	Start	Limits	End	Frequency
	0		9	2
	10		19	2
	20		29	1
	30		39	2
	40		49	1
	50		59	2
	60		69	1
	70		79	2
	80		89	1
	90		100	4

```
jeffrey@MFS-3:/mnt/d/Documents/NMSU/CS471/Program5$
```