

Assignment No. 4

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Problem Statement

Write a Java program for following exception, develop a suitable scenario in which the following exceptions occur:

- a. divide by zero
- b. Array index out of bounds exception
- c. Null pointer Exception

Sample Input and Output

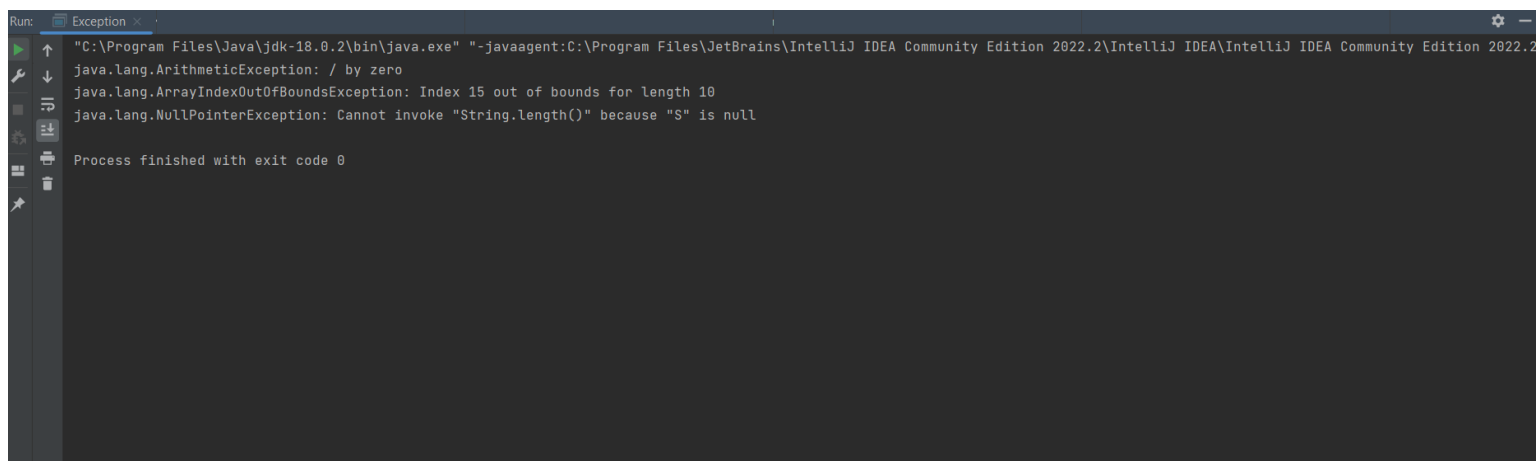
Sample Input/Parameter	Expected Output
Try to divide a number by zero	You shouldn't divide a number by zero.
Try to access the array index which does not exist.	OOPs!!!Array Index 7 out of bounds for length 6.
Try to find the length of String in method (pass parameter string as null)	Null Pointer Exception arises!!

CODE :

```
public class Exception {
    public static void main(String[] args) {
        int a = 5;
        int b = 0;
        try {
            int c = a/b;
            System.out.println(c);
        }
        catch (ArithmeticException e){
            System.out.println(e);
        }

        int s[] = new int[10];
        try{
            s[15] = 50;
        }
        catch (ArrayIndexOutOfBoundsException p){
            System.out.println(p);
        }
        String S = null;
        try {
            System.out.println(S.length());
        }
        catch (NullPointerException n){
            System.out.println(n);
        }
    }
}
```

OUTPUT:



```
Run Exception
"C:\Program Files\Java\jdk-18.0.2\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2022.2\IntelliJ IDEA\IntelliJ IDEA Community Edition 2022.2
java.lang.ArithmeticException: / by zero
java.lang.ArrayIndexOutOfBoundsException: Index 15 out of bounds for length 10
java.lang.NullPointerException: Cannot invoke "String.length()" because "S" is null

Process finished with exit code 0
```