

Error Handling

Create three new types of exceptions. Write a class with a method that throws all three. In main(), call the method but only use a single catch clause that will catch all three types of exceptions. Add a finally clause and verify that your finally clause is executed, even if a NullPointerException is thrown.

Approach:

- Created 3 custom exception classes.
- Used a switch statement to throw all exceptions. This method has a scope of throwing CustomException1, CustomException2, CustomException3, and NullPointerException, so used throws to handle them.
- In the main method, handled all the exceptions in a single catch block using the OR operator and included all exceptions.
- Used a finally block to check whether it is executed in case any exception is thrown.

Created custom exception

Defined three custom exception classes by extending Exception

```
class CustomException1 extends Exception {  
  
    public CustomException1(String message) {  
  
        super(message);  
  
    }  
  
}
```

Output

(output- for throwing a custom exception)

```

Main x
:
"C:\Program Files\Java\jdk-18.0.1.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.1.4\lib\idea_rt.ja
Caught exception: Custom Exception 1
This is the finally block,

Process finished with exit code 0

```

(output-for throwing a default(null pointer) exception)

```

Main x
:
"C:\Program Files\Java\jdk-18.0.1.1\bin\java.exe" "-javaagent:C:\Program Files\JetBrains\IntelliJ IDEA Community Edition 2024.1.4\lib\idea_rt.ja
Caught exception: No exception specified
This is the finally block,

Process finished with exit code 0

```