

Lab Exercise-5

Advanced Programming Lab-II

1. Create your own Exception class

Make a class University. This class has a method 'exam()'. exam() returns an exception 'ExamSuspendException' if stranger things happen in the University. You can implement this by having a Boolean variable (say boolean strangerThings) set to true or false. Create another class 'JUET'. JUET has a method named 't1()'. t1() makes a call to exam() along with other normal statements. Make a class ExamSuspendException and declare it extending the class Exception. Override its printStackTrace() method. Make a Test class and test your code with four possible scenarios:

- a) t1() handles ExamSuspendException using try-catch
- b) t1() ducks Exception
- c) main() handles Exception using try-catch
- d) main() ducks Exception

2. Exceptions are polymorphic

Create Exception classes for Cloth, Pant, Shirt and Tshirt. Override printStackTrace(). Create a class called 'LaundryTest'. This class has a method called unfit() which is a risky function and throws PantException, ShirtException, TshirtException or ClothException, if there is an issue in respective garment type. LaundryTest also has a main method, which calls unfit(). Do the following one-by-one and observe the output:

- a) create multiple catch statements, in order Tshirt, Shirt, Pant, Cloth, in the main to handle different exceptions. The last statement inside the main method should be System.out.println("Last line of main");
- b) make a catch block return nothing. Add finally block after all catch blocks. Write something dummy inside finally as well.
- c) change the order of catch blocks like ClothException, TshirtException, ShirtException, PantException