

## Lab1-Exception Handling –Part 2

Q1. Write an application named IndexTest in which you declare an array of 10 first names. Write a try block in which you prompt the user for an integer and display the name in the requested position. Create a catch block that catches the potential `ArrayIndexOutOfBoundsException` thrown when the user enters a number that is out of range. The catch block should also display an error message.

Q.2 The `Double.parseDouble()` method requires a String argument, but it fails if the String cannot be converted to a floating-point number. Write an application in which you try accepting a double input from a user and catch a `NumberFormatException` if one is thrown. The catch block forces the number to 0 and displays an appropriate error message.

Q.3 Write a Java program which will take array size as input from the user, and then attempt to declare an array using the entered size. If the array is created successfully, display an appropriate message. Java generates a `NegativeArraySizeException` if you attempt to create an array with a negative size, and it creates a `NumberFormatException` if you attempt to create an array using a nonnumeric value for the size. Use a catch block that executes if the array size is nonnumeric or negative, displaying a message that indicates the array was not created.

Q4. Write a Java program to create a ProductApp in which Product class will have id,name,price,color. Please find below inputs for the same.

a) Creating a separate package for MainProductApp, classes and exception

b) You need to create object array of product list

c) All the user-defined exception should be created in exception folder

d) Throwing an exception for EmptyProductList

e) Throwing an exception for InvalidId

f) Throwing an exception for InvalidPrice

g) Throwing an exception for InvalidName (Here you can take help of pattern for creating a pattern for valid product name)