Write a program in Java to demonstrate try and catch

Writing a program in Java to demonstrate the throw keyword,throws keyword and finally keyword

Program

//using Finally keyword

package com.mphasis.training;

import java.util.Scanner;

public class ExceptionHandlingDemo {

public static void main(String[] args) {

Scanner scan = new Scanner(System.in);

System.out.println("Enter two numbers (please 🙏🏽 dont enter the second number as 0)");

int first = scan.nextInt();

int second = scan.nextInt();

divideNumbers(first, second);

}

static void divideNumbers(int first, int second)

{

int result = 0;

try {

result = first / second;

System.out.println("Division of numbers is : " + result);

}catch(ArithmeticException se) {

System.out.println("Sorry divide by zero isn't defined yet. ");

}

finally {

System.out.println("finally always runs...");

}

}

}

Output: Enter two numbers (please ?? dont enter the second number as 0)

24

0

Sorry divide by zero isn't defined yet.

Finally always runs…

//using throw keyword

package com.mphasis.training;

import java.util.Scanner;

public class CustomExceptionDemo {

public static void main(String[] args) throws UserNameNotValidException {

Scanner scan = new Scanner(System.in);

System.out.println("Please enter employee's username : ");

String userName = scan.nextLine();

try {

validateUserName(userName);

} catch (UserNameNotValidException e) {

System.out.println(e.getMessage());

}

}

private static void validateUserName(String userName) throws UserNameNotValidException {

if(userName.startsWith("emp\_"))

System.out.println("Welcome " + userName + ", you are now logged in.");

else

throw new UserNameNotValidException("Invalid employee name, should start with emp\_");

}

}

class UserNameNotValidException extends Exception{

public UserNameNotValidException(String message) {

super(message);

}

}

Output:

Please enter employee's username :

emp\_hema

Welcome emp\_hema, you are now logged in.

Please enter employee's username :

hema

Invalid employee name, should start with emp\_

//using throws keyword

package com.mphasis.training;

import java.io.IOException;

public class ExceptionPropagationDemo {

public static void main(String[] args) throws InterruptedException {

work();

}

static void work() throws InterruptedException {

new Special().displayCharts(34, 11);

}

void doSomething(int var) throws IOException {

if(var < 0) {

throw new IOException();

}

}

}

class Special{

void displayCharts(int x, int y) throws InterruptedException {

//Makes the charts here

}

}