Lab task 07 by 21SW159

1. Write a java program in which exception is handled if number is divided by zero and print the exception name.

**Code:**

import java.lang.Exception;

class Practice1{

public static void main(String [] args){

try{

System.out.println(1/0);

}

catch(ArithmeticException e){

System.out.println(e);

}

}

}

**Output:**



1. Throw and catch Arithmetic, ArrayIndexOutOfBond and NullPointerException.

**Code:**

import java.lang.Exception;

class Main{

public static void main(String [] args){

try {

System.out.println(2/0);

//throw new ArrayIndexOutOfBondException();

} catch (Exception e) {

System.out.println(e);

}

try{

throw new NullPointerException();

} catch (Exception e) {

System.out.println(e);

}

try{

throw new ArrayIndexOutOfBoundsException();

}catch (Exception e) {

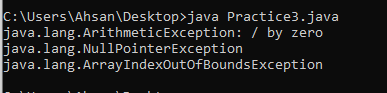
System.out.println(e);

}

}

}

**Output:**



1. Create a new userdefined exception if the user inputs value in negative integer.

**Code:**

import java.util.Scanner;

import java.lang.Exception;

class Main {

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

Scanner s = new Scanner(System.in);

try{

System.out.print("Enter the number greater than 0: ");

int num=s.nextInt();

if(num<0){

throw new NegativeException();

}

}

catch(Exception e){

System.out.println(e);

}

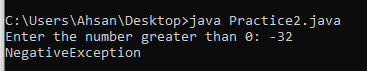
}

}

class NegativeException extends Exception{

}

**Output:**



1. Write a java program in which takes an input from the user if his/her age is less than 18 then throw an user defined exception. User defined exception class must include two methods of eligible and not eligible.

**Code:**

import java.util.Scanner;

import java.lang.Exception;

class Main{

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

Scanner sc = new Scanner(System.in);

try {

System.out.print("Enter your age: ");

int s=sc.nextInt();

if (s<18) {

throw new NotEligible();

}

} catch (Exception a) {

System.out.println(a);

}

}

}

class NotEligible extends Exception{

}

**Output:**



1. Create a new InvalidPasswordFormatException which throws an exception on following scenarios:
   * 1. Password is less than 8 characters.
     2. Password has Asterik(\*).

**Code:**

import java.util.Scanner;

import java.lang.Exception;

class Main{

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

Scanner sc = new Scanner(System.in);

try {

String s=sc.nextLine();

if (s.length()<8) {

throw new InvalidPasswordFormatException(s);

}

} catch (Exception a) {

System.out.println(a);

}

}

}

class InvalidPasswordFormatException extends Exception{

InvalidPasswordFormatException(String s){

if(s.length()<8){

System.out.println("Length is less than 8 characters");

}

if (s.contains("!")) {

System.out.println("Cannot contain ! sign in password");

}

}

}

**Output:**

