***Dt : 1/11/2022***

***Dis-Advantage of "new" keyword:***

***=>Using "new" keyword we cannot create object for the classes loaded at***

***runtime or execution time.***

***(which means "new" keyword is used to create object for the class available***

***at compilation stage)***

***==============================================================***

***faq:***

***wt is the diff b/w***

***(i)import***

***(ii)forName()***

***=>"import" statement is used to make class or interface available at***

***compilation stage.***

***=>"forName()" method is used to load the class or inteface at execution***

***stage or runtime.***

***===================================================================***

***(b)User defined Checked Exceptions:***

***=>The Checked Exceptions which are defined and raised by the programmer***

***are known as User defined Checked Exceptions.***

***=>we use the following steps to define and raise User defined checked***

***Exceptions:***

***step-1 : Add "throws" keyword to the method signature to raise the exception***

***at method\_call***

***step-2 : declare "throw" keyword in catch block and perform re-throwing***

***process.***

***Ex :(BankTransaction application converted into Exception handling process)***

***Balance.java***

***package test;***

***public class Balance {***

***public double bal=2000;***

***public double getBalance() {***

***return bal;***

***}***

***}***

***CheckPinNo.java***

***package test;***

***public class CheckPinNo {***

***public boolean verify(int pinNo) {***

***return switch(pinNo) {***

***case 1111:yield true;***

***case 2222:yield true;***

***case 3333:yield true;***

***default:yield false;***

***};***

***}***

***}***

***WithDraw.java***

***package test;***

***@SuppressWarnings("serial")***

***public class WithDraw extends Exception implements Transaction***

***{***

***public WithDraw() {}***

***public WithDraw(String msg)***

***{***

***super(msg);***

***}***

***public void process(int amt) throws WithDraw***

***{***

***try***

***{***

***if(amt>b.bal)//Exception condition***

***{***

***WithDraw wd = new WithDraw("Insuffiecient fund");//Para\_con\_call***

***throw wd;***

***}***

***System.out.println("Amt withDrawn:"+amt);***

***b.bal=b.bal-amt;***

***System.out.println("Balance amt:"+b.getBalance());***

***System.out.println("Transaction Successfull...");***

***}//end of try***

***catch(WithDraw wd)***

***{***

***throw wd;//re-throwing Exception***

***}***

***}***

***}***

***Deposit.java***

***package test;***

***public class Deposit implements Transaction{***

***public void process(int amt)***

***{***

***System.out.println("Amt deposited:"+amt);***

***b.bal=b.bal+amt;***

***System.out.println("Balance amt:"+b.getBalance());***

***System.out.println("Transaction Completed...");***

***}***

***}***

***DemoException4.java(MainClass)***

***package maccess;***

***import java.util.\*;***

***import test.\*;***

***@SuppressWarnings("serial")***

***public class DemoException4 extends Exception***

***{***

***public DemoException4(String msg) {***

***super(msg);***

***}***

***public static void main(String[] args) {***

***Scanner s = new Scanner(System.in);***

***int count = 0;***

***xyz:***

***while(true) {***

***try***

***{***

***System.out.println("Enter the pinNo:");***

***int pinNo = s.nextInt();***

***CheckPinNo cpn = new CheckPinNo();***

***boolean k = cpn.verify(pinNo);***

***if(!k)//Exception Condition***

***{***

***DemoException4 de = new DemoException4("Invalid PinNo");***

***throw de;***

***}***

***System.out.println("====Choice====");***

***System.out.println("1.WithDraw\n2.Deposit");***

***System.out.println("Enter the Choice:");***

***switch(s.nextInt())***

***{***

***case 1:***

***System.out.println("Enter the amt:");***

***int a1 = s.nextInt();***

***if(!(a1>0 && a1%100==0))//Exception Condition***

***{***

***DemoException4 de = new DemoException4("Invalid amt");***

***throw de;***

***}***

***WithDraw wd2 = new WithDraw();//0\_para\_Con\_call***

***wd2.process(a1);//Method\_call***

***break xyz;***

***case 2:***

***System.out.println("Enter the amt:");***

***int a2 = s.nextInt();***

***if(!(a2>0 && a2%100==0))***

***{***

***DemoException4 de = new DemoException4("Invalid amt");***

***throw de;***

***}***

***Deposit dp = new Deposit();***

***dp.process(a2);***

***break xyz;***

***default:***

***System.out.println("Invalid Choice...");***

***break xyz;***

***}//end of switch***

***}//end of try***

***catch(DemoException4 de)***

***{***

***System.out.println(de.getMessage());***

***if(de.getMessage().equals("Invalid PinNo"))***

***{***

***count++;***

***if(count==3)***

***{***

***System.out.println("Transaction blocked...");***

***break xyz;***

***}***

***}//end of if***

***else***

***{***

***break xyz;***

***}***

***}***

***catch(WithDraw wd)***

***{***

***System.out.println(wd.getMessage());***

***break xyz;***

***}***

***}//end of loop***

***s.close();***

***}***

***}***

***=========================================================***

***Assignment1:***

***Convert BankTransaction application with anonymous InnerClasses into***

***Exception Handling process.***

***Assignment2:***

***Convert BankTransaction application with LambdaExpression into***

***Exception Handling process.***

***======================================================================***