1. Test different forms of try, catch & finally:
   1. Try with multiple catch
   2. Nested try/ catch blocks
   3. Try, catch & finally
   4. Try with finally

**package** com.zensar;

**public** **class** AssignmentQuenstionFirstVariationOfTryBlocks {

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

// **TODO** Auto-generated method stub

**int** integerValue = 45;

**int** arr[] = **new** **int**[5];

System.***out***.println("Multiple Catch Block Working Scenerio :::::::::::::::::");

// Multiple Catch block

**try** {

System.***out***.println(integerValue/0);

System.***out***.println(arr[6]);

}

**catch**(ArithmeticException e) {

//System.out.println ("Can't divide by 0");

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

}

**catch**(NumberFormatException e) {

//System.out.println("Akki is not a integer");

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

}

**catch**(StringIndexOutOfBoundsException e) {

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

}

System.***out***.println("Nested Try/Catch Block Working Scenerio :::::::::::::::::");

// Nested Try/Catch block

**try** {

**try** {

System.***out***.println(integerValue/0);

}

**catch**(ArithmeticException e) {

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

}

System.***out***.println(arr[6]);

}

**catch**(Exception e)

{

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

}

System.***out***.println("Try/Catch/Finally Block Working Scenerio :::::::::::::::::");

// Try/Catch/Final block

**try** {

System.***out***.println(integerValue/0);

}

**catch**(ArithmeticException e) {

//System.out.println ("Can't divide by 0");

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

}

**finally** {

System.***out***.println("End of Try/Catch Block work");

}

System.***out***.println("Try/Finally Block Working Scenerio :::::::::::::::::");

//Try/final Block

**try** {

System.***out***.println(arr[6]);

}

**finally** {

System.***out***.println("End of Try block");

}

}

}

1. Writea user defined exception called ‘InsufficientBalanceException’. Use this exception in withdraw() method of class Account. Test it by making the exception checked & then unchecked.

**package** com.zensar;

**public** **class** AssignmentQuentionSecond {

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

// **TODO** Auto-generated method stub

AccountClass employeeObject = **new** AccountClass(2000);

employeeObject.Dep\_Amount(15000);

employeeObject.Wid\_Amount(20000);

**try** {

employeeObject.Wid\_Amount("6000");

}

**catch**(InsufficientBalanceException e)

{

System.***out***.println("Invalid data type check value first " );

}

}

}

**package** com.zensar;

**public** **class** AccountClass {

**private** **int** Amount;

**public** AccountClass(**int** Amount) {

**super**();

**this**.Amount = Amount;

}

**public** **void** Wid\_Amount(String widthow) **throws** InsufficientBalanceException {

**throw** **new** InsufficientBalanceException();

}

**public** **void** Wid\_Amount(**int** widthow) {

**this**.Amount -= widthow;

**if**(**this**.Amount < 0)

{

**try** {

**throw** **new** InsufficientBalanceException();

}

**catch**(InsufficientBalanceException e)

{

System.***out***.println(e.Insufficent\_balance());

**this**.Amount = 0;

}

}

}

**public** **void** Dep\_Amount(**int** deposit) {

**this**.Amount += deposit;

}

**public** **int** Display() {

**return** Amount;

}

}

**package** com.zensar;

**public** **class** InsufficientBalanceException **extends** Exception{

// public InsufficientBalanceException() {

//

// }

//

// public InsufficientBalanceException(String msg) {

// super(msg);

// }

**public** String Not\_In\_Format(String msg){

**return** "Check Type of Value you have entered";

}

**public** String Insufficent\_balance() {

**return** "Insufficient balance in Account";

}

}

1. Write a user defined auto closable class & test its close method invocation by using the try with resources.

**package** com.zensar;

**import** java.io.BufferedReader;

**import** java.io.File;

**import** java.io.FileOutputStream;

**import** java.io.FileReader;

**import** java.io.IOException;

**import** java.util.Scanner;

**public** **class** AssignmentQuestion3 **implements** AutoCloseable{

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

// **TODO** Auto-generated method stub

**try** {

File file = **new** File("fileContext.txt");

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

FileOutputStream fos=**new** FileOutputStream(file, **true**); // true for append mode

System.***out***.print("Enter file content: ");

String strWantToWriteInFile = sc.nextLine();

**byte**[] b= strWantToWriteInFile.getBytes(); //converts string into bytes

fos.write(b); //writes bytes into file

fos.close();

System.***out***.println("file saved.");

**try** (FileReader fr = **new** FileReader(file);

BufferedReader br = **new** BufferedReader(fr);) {

String sCurrentLine;

**while** ((sCurrentLine = br.readLine()) != **null**) {

System.***out***.println(sCurrentLine);

}

} **catch** (IOException e) {

e.printStackTrace();

}

}

**catch**(Exception e)

{

e.printStackTrace();

}

**finally**{

System.***out***.println("Created File in Current folder");

}

}

@Override

**public** **void** close() **throws** Exception {

// **TODO** Auto-generated method stub

}

}