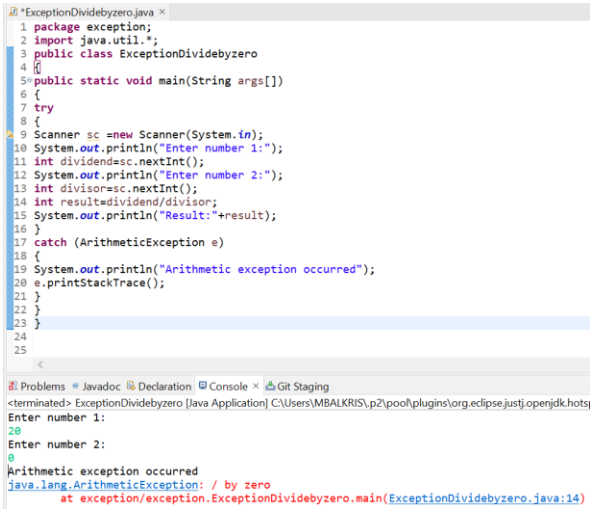
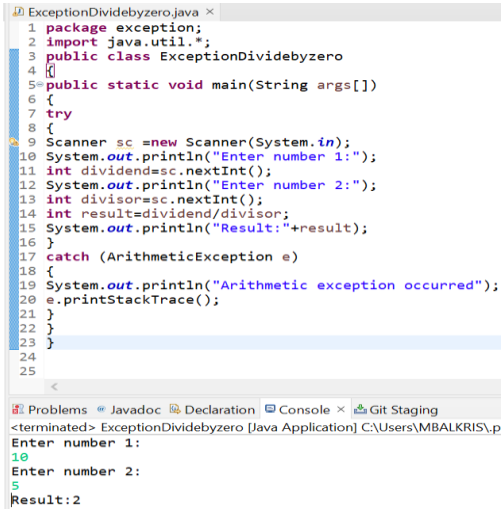
CORE JAVA

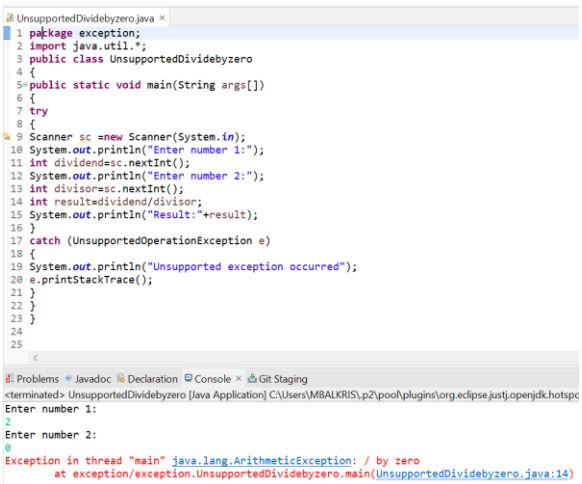
EXCEPTION HANDLING ASSIGNMENT

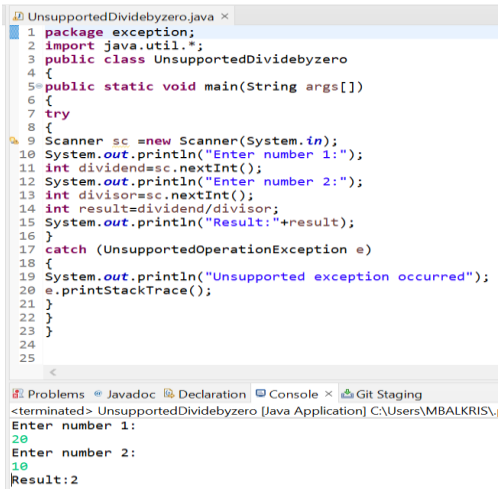
1. Write an application that accepts two numbers, divides the first number with the second number and display the result. Hint: You need to handle ArithmeticException which is thrown where there is an attempt to divide a number by zero.
   Code: -





2. Carrying forward with the above problem, handle ArithmeticException by raising UnsupportedOperationException as a solution.
   Code: -





3. Write an application to perform withdraw functionality on a SavingAccount object. Point to note:
   a. RaiseInsufficientBalanceException if you are trying to withdraw more than balance or when your balance is zero. E.g. if your balance is 2000 and if you are trying to withdraw 2100 or if your balance is zero and you are trying to withdraw positive value.

b. RaiseIllegalBankTransactionException if you are trying to withdraw a negative value from your balance. E.g. if you trying to withdraw a negative value savingAcc.withdraw(-1000);

Note: - SavingAccount

|--long id

|--double balance

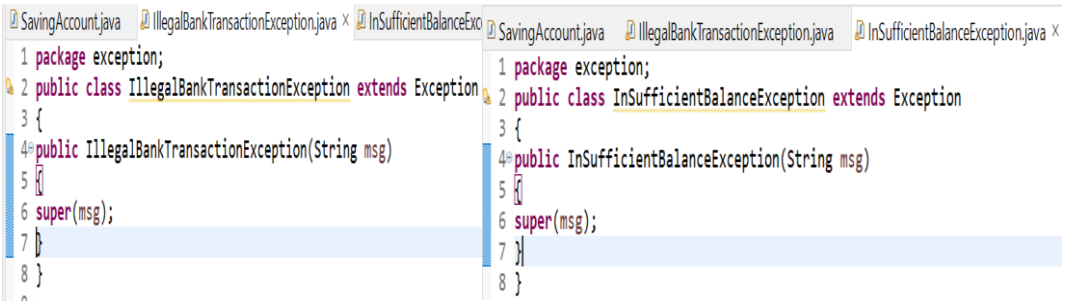
|-- double withdraw (double amount)

|-- double deposit (double amount)

Code: -

SavingAccount.java

IllegalBankTransactionException.java InSufficientBalanceException



Withdraw.java

SavingAccount.java | IllegalBankTransactionException.java | InSufficientBalanceException.java | Withdraw.java

```
1  package exception;
2  import java.util.Scanner;
3  public class Withdraw
4  {
5  public static void main(String[] args)
6  {
7  Scanner sc = new Scanner(System.in);
8  SavingAccount Account = new SavingAccount();
9  Account.show();
10 System.out.println("Enter amount to withdraw:");
11 double amount = sc.nextDouble();
12 try
13 {
14 Account.withDraw(amount);
15 }
16 catch (InSufficientBalanceException e)
17 {
18 System.out.println("Error : " + e.getMessage());
19 }
20 catch (IllegalBankTransactionException e)
21 {
22 System.out.println("Error : " + e.getMessage());
23 }
24 Account.show();
25 }
```

Problems | Javadoc | Declaration | Console | Git Staging

```
<terminated> Withdraw [Java Application] C:\Users\MBALKRIS\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.
LoginId : 123
Balance : 2000.0
Enter amount to withdraw:
-1000
Error : Illegal Bank Transaction Exception
LoginId : 123
Balance : 2000.0
```

Actual output: -

Problems | Javadoc | Declaration | Console | Git Staging

```
<terminated> Withdraw [Java Application] C:\Users\MBALKRIS\.p2\po
LoginId : 123
Balance : 2000.0
Enter amount to withdraw:
1000
Your money:1000.0
LoginId : 123
Balance : 1000.0
```