Question 1:

```
1227971_Lab1_q1 - NetBeans IDE 8.2
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                                         — Start Page × 💩 L227971_Lab1_q1.java × 🚳 L227971_Lab1_q1.java ×
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   package 1227971_lab1_q1;
     2
3 import java.util.*;
  L227971_Lab1_q1.java
  Libraries

Test Libraries
                                                                          public class L227971_Lab1_q1 {
    public static void main(String[] args) {
        Scanner src = new Scanner(System.in);
}
                                                                    8
9
10
11
12
                                                                                   System.out.println("Please enter 2 numbers");
                                                                                   System.out.println("Enter first number: ");
                                                                                  Integer numl = src.nextInt();
                                                                    Output - I227971_Lab1_q1 (run) ×
                                                                        Enter first number:
                                                                        Enter second number:
                                                                         1. Addition
                                                                         3. Multiplication
                                                                         4. Division
 Navigator ×
                                                                         5. Modulus
                               ∨ | <empty>
                                                                         Enter your choice:
⊡-- 😭 L227971_Lab1_q1
                                                                         Division by zero is not allowed. Please try againEnter a new second number:
    -- () main(String[] args)
                                                                         The result is: 5
                                                                         BUILD SUCCESSFUL (total time: 13 seconds)
```

```
package 1227971_lab1_q1;
import java.util.*;
```

```
public class L227971 Lab1 q1 {
   public static void main(String[] args) {
        Scanner src = new Scanner(System.in);
        System.out.println("Please enter 2 numbers");
        System.out.println("Enter first number: ");
        Integer num1 = src.nextInt();
        System.out.println("Enter second number: ");
        Integer num2 = src.nextInt();
        System.out.println("1. Addition");
        System.out.println("2. Subtraction");
        System.out.println("3. Multiplication");
        System.out.println("4. Division");
        System.out.println("5. Modulus");
        Integer choice;
        System.out.println("Enter your choice: ");
        choice = src.nextInt();
        while (choice < 1 || choice > 5)
            System.out.println("Invalid choice, please enter a valid value!!!");
            System.out.println("Enter your choice: ");
            choice = src.nextInt();
        Integer result = 0;
        if (choice == 1)
            result = num1 + num2;
        else if (choice == 2)
```

```
result = num1 - num2;
else if (choice == 3)
   result = num1 * num2;
else if (choice == 4)
   try{ // try the division by zero and if exception catch it
    result = num1 / num2;
    catch(ArithmeticException e) // perform the error function
        System.out.print("Division by zero is not allowed. Please try again");
        System.out.println("Enter a new second number: ");
        num2 = src.nextInt();
        while (num2 == 0)
            System.out.println("Num 2 can't be zero. Enter new num: ");
            num2 = src.nextInt();
        result = num1 / num2;
else if (choice == 5)
   result = num1 % num2;
else
   System.out.println("Invalid Value");
```

```
System.out.println("The result is: " + result); // answer
src.close(); // closing the scanner
}
```