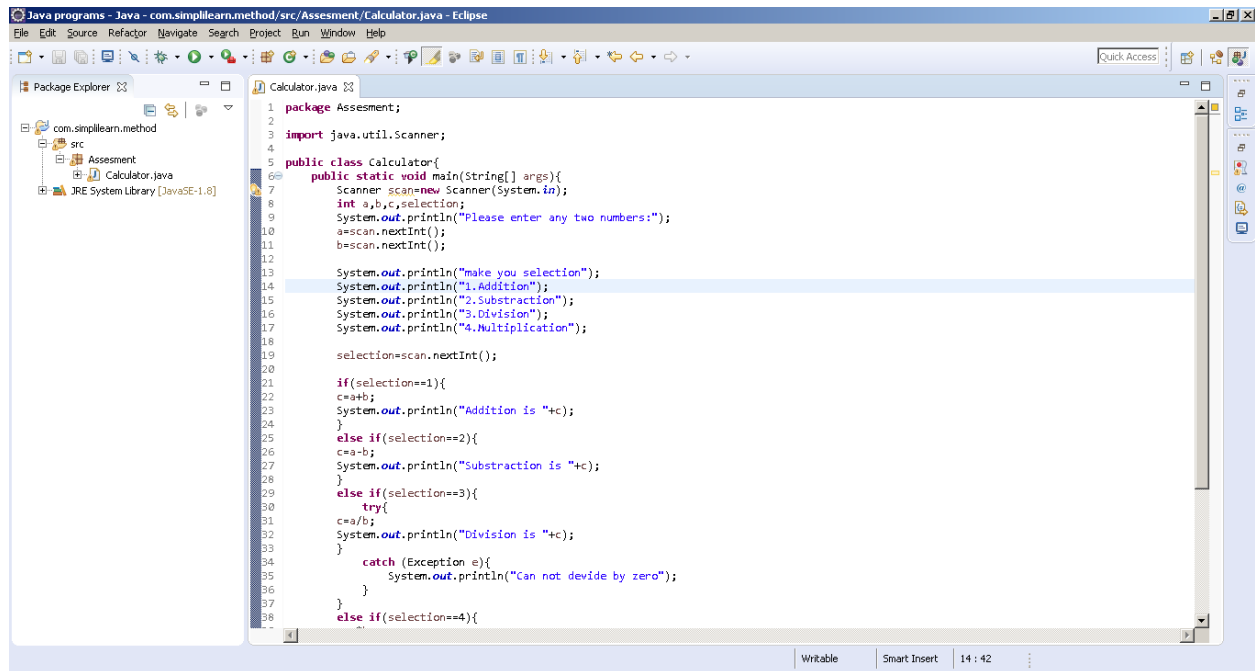
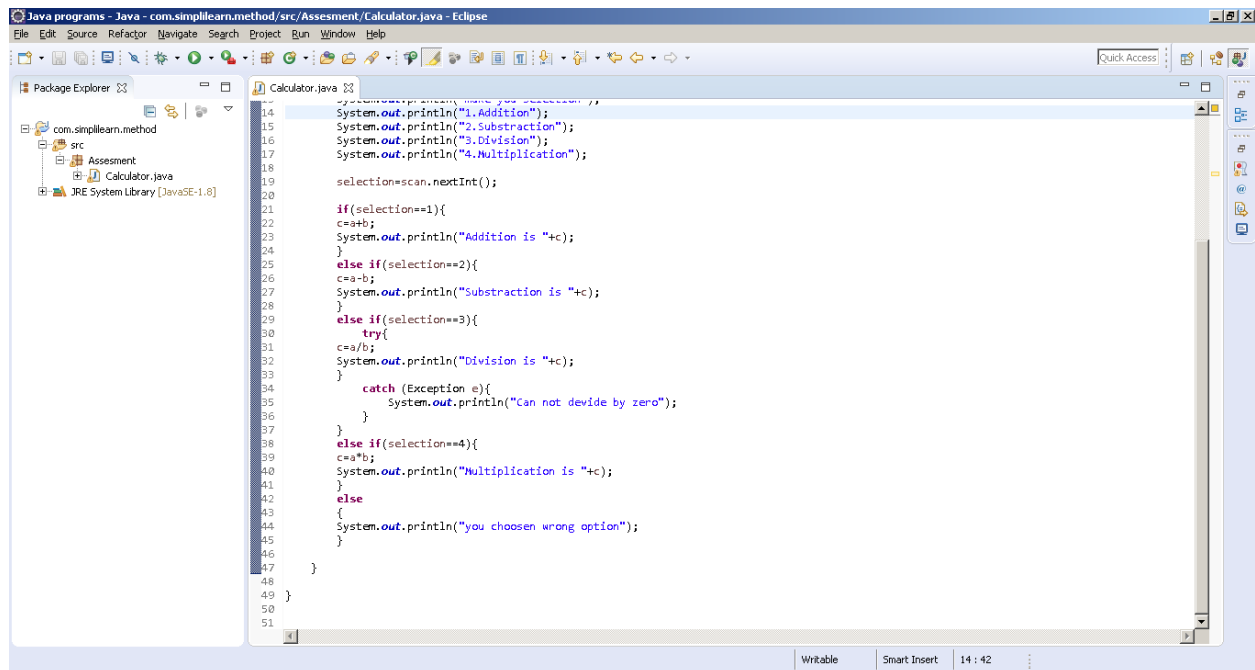


Arithmetic Calculator Program:➡



The screenshot shows the Eclipse IDE with the file 'Calculator.java' open. The code defines a 'Calculator' class with a 'main' method. It uses a 'Scanner' to take input from the user. The program prompts the user to enter two numbers and then asks for a selection (1 for Addition, 2 for Subtraction, 3 for Division, 4 for Multiplication). The code handles the first three selections: Addition, Subtraction, and Division. For Division, it includes a try-catch block to handle a 'Divide by zero' exception. The code is as follows:

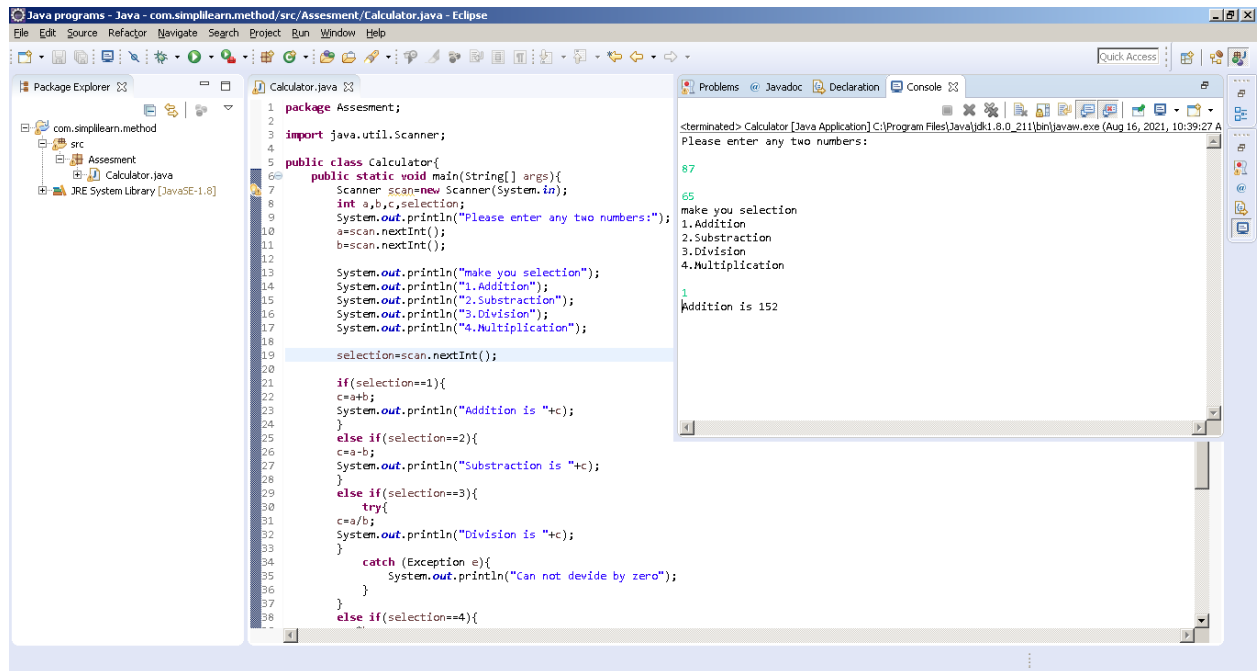
```
1 package Assesment;  
2  
3 import java.util.Scanner;  
4  
5 public class Calculator{  
6     public static void main(String[] args){  
7         Scanner scan=new Scanner(System.in);  
8         int a,b,c,selection;  
9         System.out.println("Please enter any two numbers:");  
10        a=scan.nextInt();  
11        b=scan.nextInt();  
12  
13        System.out.println("make you selection");  
14        System.out.println("1.Addition");  
15        System.out.println("2.Substraction");  
16        System.out.println("3.Division");  
17        System.out.println("4.Multiplication");  
18  
19        selection=scan.nextInt();  
20  
21        if(selection==1){  
22            c=a+b;  
23            System.out.println("Addition is "+c);  
24        }  
25        else if(selection==2){  
26            c=a-b;  
27            System.out.println("Substraction is "+c);  
28        }  
29        else if(selection==3){  
30            try{  
31                c=a/b;  
32                System.out.println("Division is "+c);  
33            }  
34            catch (Exception e){  
35                System.out.println("Can not devide by zero");  
36            }  
37        }  
38        else if(selection==4){
```



The screenshot shows the Eclipse IDE with the file 'Calculator.java' open, displaying the continuation of the code from the previous screenshot. The code handles the selection for Multiplication (4) and includes a default case for any other selection. The code is as follows:

```
39            c=a*b;  
40            System.out.println("Multiplication is "+c);  
41        }  
42        else  
43        {  
44            System.out.println("you choosen wrong option");  
45        }  
46    }  
47 }  
48  
49 }  
50  
51 }
```

1. Addition



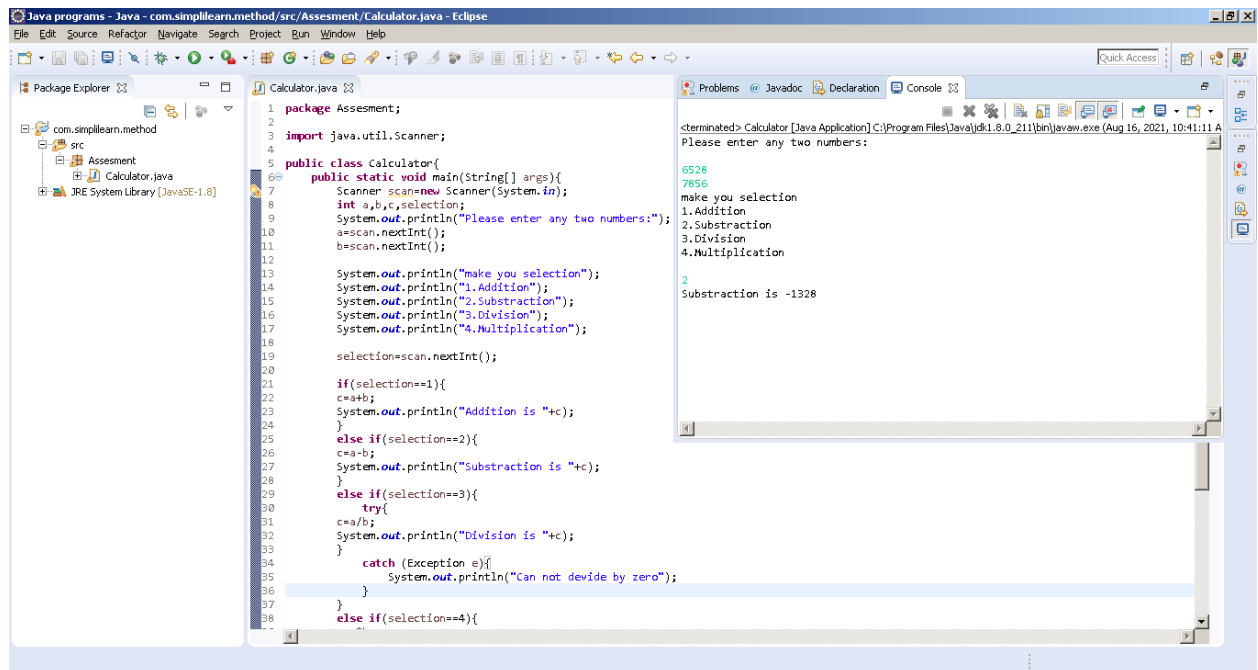
The screenshot shows the Eclipse IDE with a Java project named 'com.simplilearn.method'. The package explorer on the left shows the project structure. The main editor displays the source code for 'Calculator.java'. The code defines a 'Calculator' class with a 'main' method that prompts the user to enter two numbers and a selection. The selection options are 1. Addition, 2. Subtraction, 3. Division, and 4. Multiplication. The code uses a 'Scanner' to read input and 'System.out.println' to display output. The console on the right shows the execution output, indicating that the user entered two numbers and selected '1. Addition', resulting in 'Addition is 152'.

```
1 package Assesment;
2
3 import java.util.Scanner;
4
5 public class Calculator{
6     public static void main(String[] args){
7         Scanner scan=new Scanner(System.in);
8         int a,b,c,selection;
9         System.out.println("Please enter any two numbers:");
10        a=scan.nextInt();
11        b=scan.nextInt();
12
13        System.out.println("make you selection");
14        System.out.println("1.Addition");
15        System.out.println("2.Substraction");
16        System.out.println("3.Division");
17        System.out.println("4.Multiplication");
18
19        selection=scan.nextInt();
20
21        if(selection==1){
22            c=a+b;
23            System.out.println("Addition is "+c);
24        }
25        else if(selection==2){
26            c=a-b;
27            System.out.println("Substraction is "+c);
28        }
29        else if(selection==3){
30            try{
31                c=a/b;
32                System.out.println("Division is "+c);
33            }
34            catch (Exception e){
35                System.out.println("Can not devide by zero");
36            }
37        }
38        else if(selection==4){
```

Console Output:

```
<terminated> Calculator [Java Application] C:\Program Files\Java\jdk1.8.0_211\bin\javaw.exe (Aug 16, 2021, 10:39:27 A
Please enter any two numbers:
87
65
make you selection
1.Addition
2.Substraction
3.Division
4.Multiplication
1
Addition is 152
```

2. Subtraction:➡



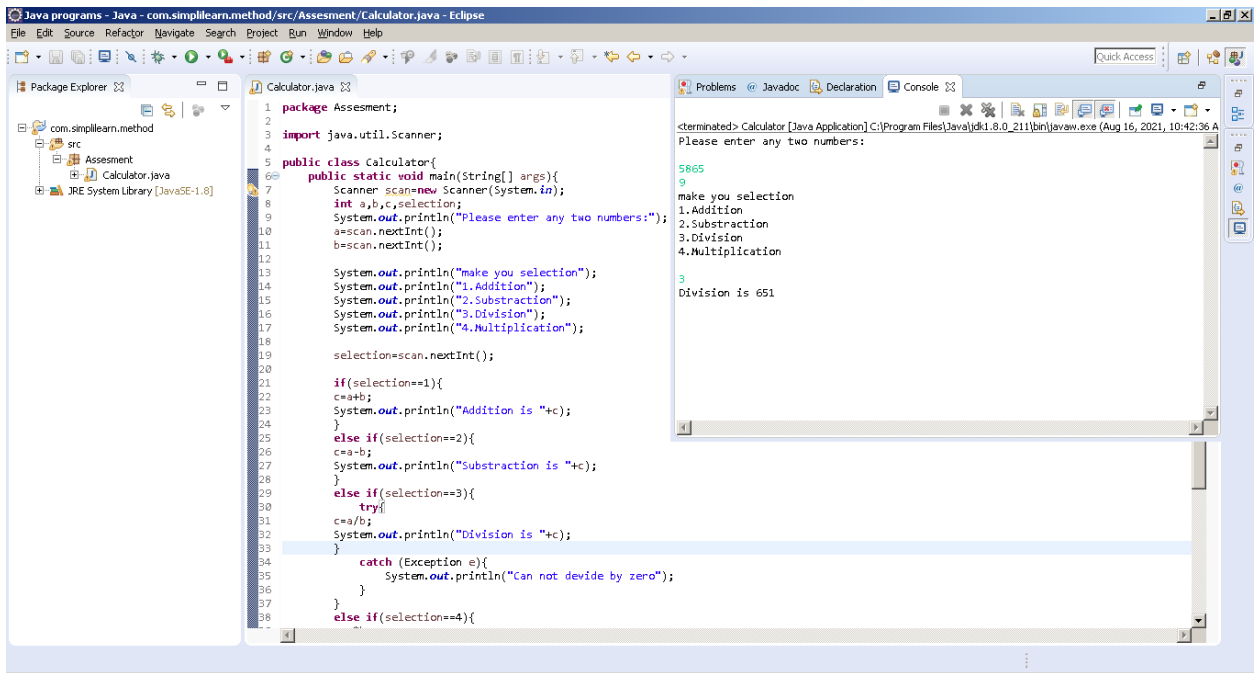
The screenshot shows the Eclipse IDE with the same Java project. The main editor displays the source code for 'Calculator.java'. The code is identical to the previous one, but the user has selected '2. Substraction' in the console. The console output shows 'Substraction is -1328'.

```
1 package Assesment;
2
3 import java.util.Scanner;
4
5 public class Calculator{
6     public static void main(String[] args){
7         Scanner scan=new Scanner(System.in);
8         int a,b,c,selection;
9         System.out.println("Please enter any two numbers:");
10        a=scan.nextInt();
11        b=scan.nextInt();
12
13        System.out.println("make you selection");
14        System.out.println("1.Addition");
15        System.out.println("2.Substraction");
16        System.out.println("3.Division");
17        System.out.println("4.Multiplication");
18
19        selection=scan.nextInt();
20
21        if(selection==1){
22            c=a+b;
23            System.out.println("Addition is "+c);
24        }
25        else if(selection==2){
26            c=a-b;
27            System.out.println("Substraction is "+c);
28        }
29        else if(selection==3){
30            try{
31                c=a/b;
32                System.out.println("Division is "+c);
33            }
34            catch (Exception e){
35                System.out.println("Can not devide by zero");
36            }
37        }
38        else if(selection==4){
```

Console Output:

```
<terminated> Calculator [Java Application] C:\Program Files\Java\jdk1.8.0_211\bin\javaw.exe (Aug 16, 2021, 10:41:11 A
Please enter any two numbers:
6528
7856
make you selection
1.Addition
2.Substraction
3.Division
4.Multiplication
2
Substraction is -1328
```

3. Division ➔



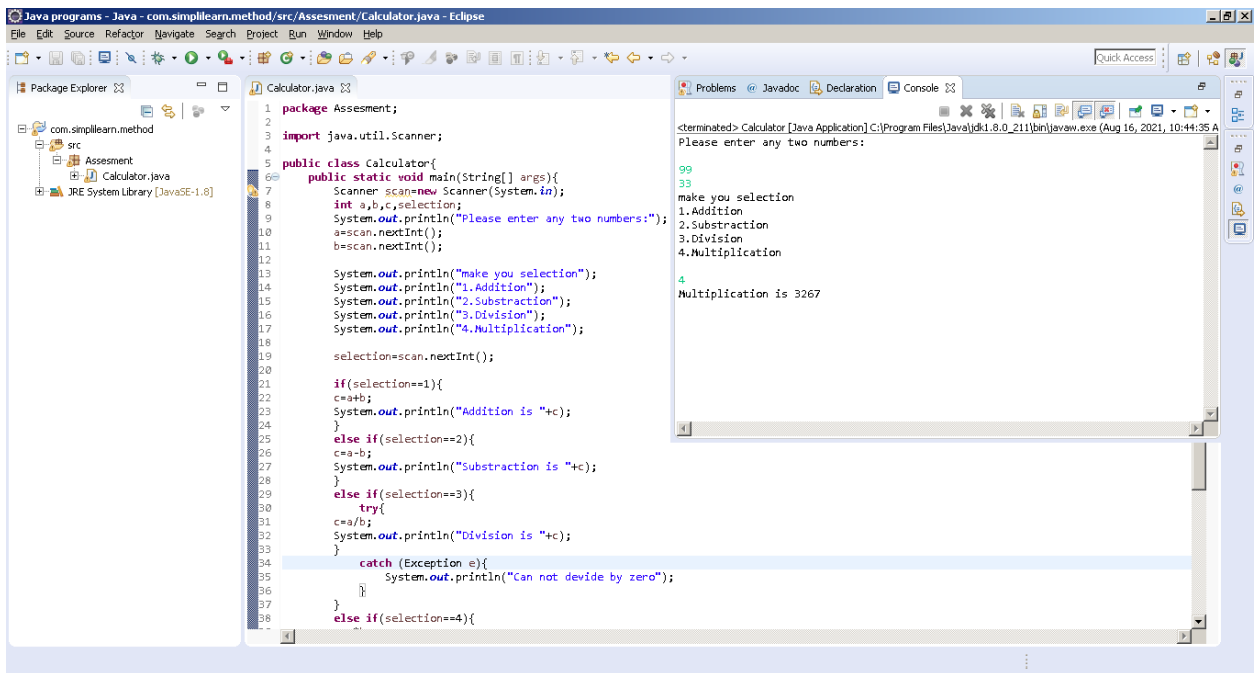
The screenshot shows the Eclipse IDE with the file `Calculator.java` open. The code implements a calculator with four operations: Addition, Subtraction, Division, and Multiplication. The division logic is implemented using a `try-catch` block to handle `ArithmeticException` when dividing by zero. The console output shows the program running and displaying the result of a division operation.

```
1 package Assesment;
2
3 import java.util.Scanner;
4
5 public class Calculator{
6     public static void main(String[] args){
7         Scanner scan=new Scanner(System.in);
8         int a,b,c,selection;
9         System.out.println("Please enter any two numbers:");
10        a=scan.nextInt();
11        b=scan.nextInt();
12
13        System.out.println("make you selection");
14        System.out.println("1.Addition");
15        System.out.println("2.Substraction");
16        System.out.println("3.Division");
17        System.out.println("4.Multiplication");
18
19        selection=scan.nextInt();
20
21        if(selection==1){
22            c=a+b;
23            System.out.println("Addition is "+c);
24        }
25        else if(selection==2){
26            c=a-b;
27            System.out.println("Substraction is "+c);
28        }
29        else if(selection==3){
30            try{
31                c=a/b;
32                System.out.println("Division is "+c);
33            }
34            catch (Exception e){
35                System.out.println("Can not devide by zero");
36            }
37        }
38        else if(selection==4){
```

Console Output:

```
<terminated> Calculator [Java Application] C:\Program Files\Java\jdk1.8.0_211\bin\javaw.exe (Aug 16, 2021, 10:42:36 A
Please enter any two numbers:
5865
9
make you selection
1.Addition
2.Substraction
3.Division
4.Multiplication
3
Division is 651
```

4. Multiplication ➔



The screenshot shows the Eclipse IDE with the file `Calculator.java` open. The code implements a calculator with four operations: Addition, Subtraction, Division, and Multiplication. The multiplication logic is implemented using a simple multiplication operation. The console output shows the program running and displaying the result of a multiplication operation.

```
1 package Assesment;
2
3 import java.util.Scanner;
4
5 public class Calculator{
6     public static void main(String[] args){
7         Scanner scan=new Scanner(System.in);
8         int a,b,c,selection;
9         System.out.println("Please enter any two numbers:");
10        a=scan.nextInt();
11        b=scan.nextInt();
12
13        System.out.println("make you selection");
14        System.out.println("1.Addition");
15        System.out.println("2.Substraction");
16        System.out.println("3.Division");
17        System.out.println("4.Multiplication");
18
19        selection=scan.nextInt();
20
21        if(selection==1){
22            c=a+b;
23            System.out.println("Addition is "+c);
24        }
25        else if(selection==2){
26            c=a-b;
27            System.out.println("Substraction is "+c);
28        }
29        else if(selection==3){
30            try{
31                c=a/b;
32                System.out.println("Division is "+c);
33            }
34            catch (Exception e){
35                System.out.println("Can not devide by zero");
36            }
37        }
38        else if(selection==4){
```

Console Output:

```
<terminated> Calculator [Java Application] C:\Program Files\Java\jdk1.8.0_211\bin\javaw.exe (Aug 16, 2021, 10:44:35 A
Please enter any two numbers:
99
33
make you selection
1.Addition
2.Substraction
3.Division
4.Multiplication
4
Multiplication is 3267
```

5. Wrong selection →

The screenshot shows the Eclipse IDE with a Java project named 'com.simplelearn.method'. The package explorer on the left shows the project structure. The main editor displays the 'Calculator.java' file. The code defines a 'Calculator' class with a 'main' method that uses a 'Scanner' to take input from the user. It prompts the user to enter two numbers and then asks for a selection (1 for Addition, 2 for Subtraction, 3 for Division, 4 for Multiplication). The code uses a series of 'if' and 'else if' statements to handle the selection. In the console, the output shows the program running and the user entering '5625' for the first number, '265' for the second number, and '6' for the selection. The program then prints 'you choosen wrong option'.

```
1 package Assessment;
2
3 import java.util.Scanner;
4
5 public class Calculator{
6     public static void main(String[] args){
7         Scanner scan=new Scanner(System.in);
8         int a,b,c,selection;
9         System.out.println("Please enter any two numbers;");
10        a=scan.nextInt();
11        b=scan.nextInt();
12
13        System.out.println("make you selection");
14        System.out.println("1.Addition");
15        System.out.println("2.Substraction");
16        System.out.println("3.Division");
17        System.out.println("4.Multiplication");
18
19        selection=scan.nextInt();
20
21        if(selection==1){
22            c=a+b;
23            System.out.println("Addition is "+c);
24        }
25        else if(selection==2){
26            c=a-b;
27            System.out.println("Substraction is "+c);
28        }
29        else if(selection==3){
30            try{
31                c=a/b;
32                System.out.println("Division is "+c);
33            }
34            catch (Exception e){
35                System.out.println("Can not devide by zero");
36            }
37        }
38        else if(selection==4){
39            c=a*b;
40            System.out.println("Multiplication is "+c);
41        }
42        else{
43            System.out.println("you choosen wrong option");
44        }
45    }
46 }
47
48
49
50
51
```

Console Output:

```
<terminated> Calculator [Java Application] C:\Program Files\Java\jdk1.8.0_211\bin\javaw.exe (Aug 16, 2021, 10:46:21 AM)
Please enter any two numbers:
5625
265
make you selection
1.Addition
2.Substraction
3.Division
4.Multiplication
6
you choosen wrong option
```

6. Output of Exception handling:→

The screenshot shows the Eclipse IDE with the same Java project. The main editor displays the 'Calculator.java' file. The code is similar to the previous one, but it includes a 'try-catch' block for division to handle the 'ArithmeticException' that occurs when dividing by zero. In the console, the output shows the program running and the user entering '50' for the first number, '0' for the second number, and '3' for the selection. The program then prints 'Can not devide by zero'.

```
14 System.out.println("1.Addition");
15 System.out.println("2.Substraction");
16 System.out.println("3.Division");
17 System.out.println("4.Multiplication");
18
19 selection=scan.nextInt();
20
21 if(selection==1){
22     c=a+b;
23     System.out.println("Addition is "+c);
24 }
25 else if(selection==2){
26     c=a-b;
27     System.out.println("Substraction is "+c);
28 }
29 else if(selection==3){
30     try{
31         c=a/b;
32         System.out.println("Division is "+c);
33     }
34     catch (Exception e){
35         System.out.println("Can not devide by zero");
36     }
37 }
38 else if(selection==4){
39     c=a*b;
40     System.out.println("Multiplication is "+c);
41 }
42 else{
43     System.out.println("you choosen wrong option");
44 }
45
46 }
47
48
49
50
51
```

Console Output:

```
<terminated> Calculator [Java Application] C:\Program Files\Java\jdk1.8.0_211\bin\javaw.exe (Aug 16, 2021, 10:34:31 AM)
Please enter any two numbers:
50
0
make you selection
1.Addition
2.Substraction
3.Division
4.Multiplication
3
Can not devide by zero
```