

PROGRAM 6:
1MS22CI053
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Write a java program to read two positive integers and perform the division operation on them and display the result if a user enters a positive integer and non-zero denominator. Else, If the input is negative or the denominator is zero, generate negative number input and divide by zero exception to handle the scenario

```
import java.util.Scanner;

public class Program6 {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        int numerator = 0;
        int denominator = 0;
        boolean validInput = false;

        while (!validInput) {
            try {

                System.out.print("Enter the numerator: ");
                numerator = scanner.nextInt();

                System.out.print("Enter the denominator: ");
                denominator = scanner.nextInt();

                if (numerator < 0) {
                    throw new IllegalArgumentException("Numerator cannot be
negative");
                }
                if (denominator <= 0) {
                    throw new ArithmeticException("Denominator cannot be zero
or negative");
                }

                int result = numerator / denominator;
                System.out.println("The result is: " + result);
                validInput = true;
            }
            catch (IllegalArgumentException | ArithmeticException e) {
                // Display error message and prompt for input again
                System.out.println("ERROR: " + e.getMessage());
                System.out.println("Please enter valid inputs again.");
            }
        }
    }
}
```

```
    scanner.close();  
}  
}
```

PROBLEMS 3 OUTPUT DEBUG CONSOLE TERMINAL PORTS COMMENTS

```
a\Roaming\Code\User\workspaceStorage\f627a3454c4d45503bec8c3bb79407a0\redhat.java\jdt_ws\JAVA_9b98cd54\bin' 'Program6'  
Enter the numerator: -12  
Enter the denominator: 6  
ERROR: Negative number input for numerator  
Please enter valid inputs again.  
Enter the numerator: 12  
Enter the denominator: -6  
ERROR: Denominator cannot be zero or negative  
Please enter valid inputs again.  
Enter the numerator: 12  
Enter the denominator: 6  
The result is: 2  
PS C:\Users\Admin\Desktop\JAVA> ^C  
PS C:\Users\Admin\Desktop\JAVA>  
PS C:\Users\Admin\Desktop\JAVA> c::; cd 'c:\Users\Admin\Desktop\JAVA'; & 'C:\Program Files\Java\jdk-21\bin\java.exe' '-XX:-  
a\Roaming\Code\User\workspaceStorage\f627a3454c4d45503bec8c3bb79407a0\redhat.java\jdt_ws\JAVA_9b98cd54\bin' 'Program6'  
Enter the numerator: 
```