

Lab Series 6**Exercise 1: Identifying Syntax Errors**

The following Java program contains syntax errors. Is it possible to manage them using exceptions? If Yes, correct the given program, otherwise, justify your answer.

```
// Original code with syntax errors

public class SyntaxErrorExample {

    public static void main(String[] args) {

        int number = 10

        System.out.println("Number is: " + number);

    }

}
```

Exercise 2: Handling ArithmeticException

Write a program that takes two integer inputs from the command line and performs division. Use a try-catch block to handle `ArithmeticException` when dividing by zero and print a custom error message.

Exercise 3: Custom Exception

Create a custom exception called `InvalidInputException` that is thrown when an input value is negative. Write a program that prompts the user for a positive integer and uses the custom exception to handle invalid input.

Exercise 4: Multiple Exception Handling

Write a program that reads two integers from the command line and performs division. Handle `NumberFormatException` if the input is not an integer, and `ArithmeticException` if there is division by zero.

Exercise 5: Finally Block

Write a program that performs file operations using a `try-catch` block and includes a `finally` block to close the file even if an exception occurs.