WHITEBOX TESTING

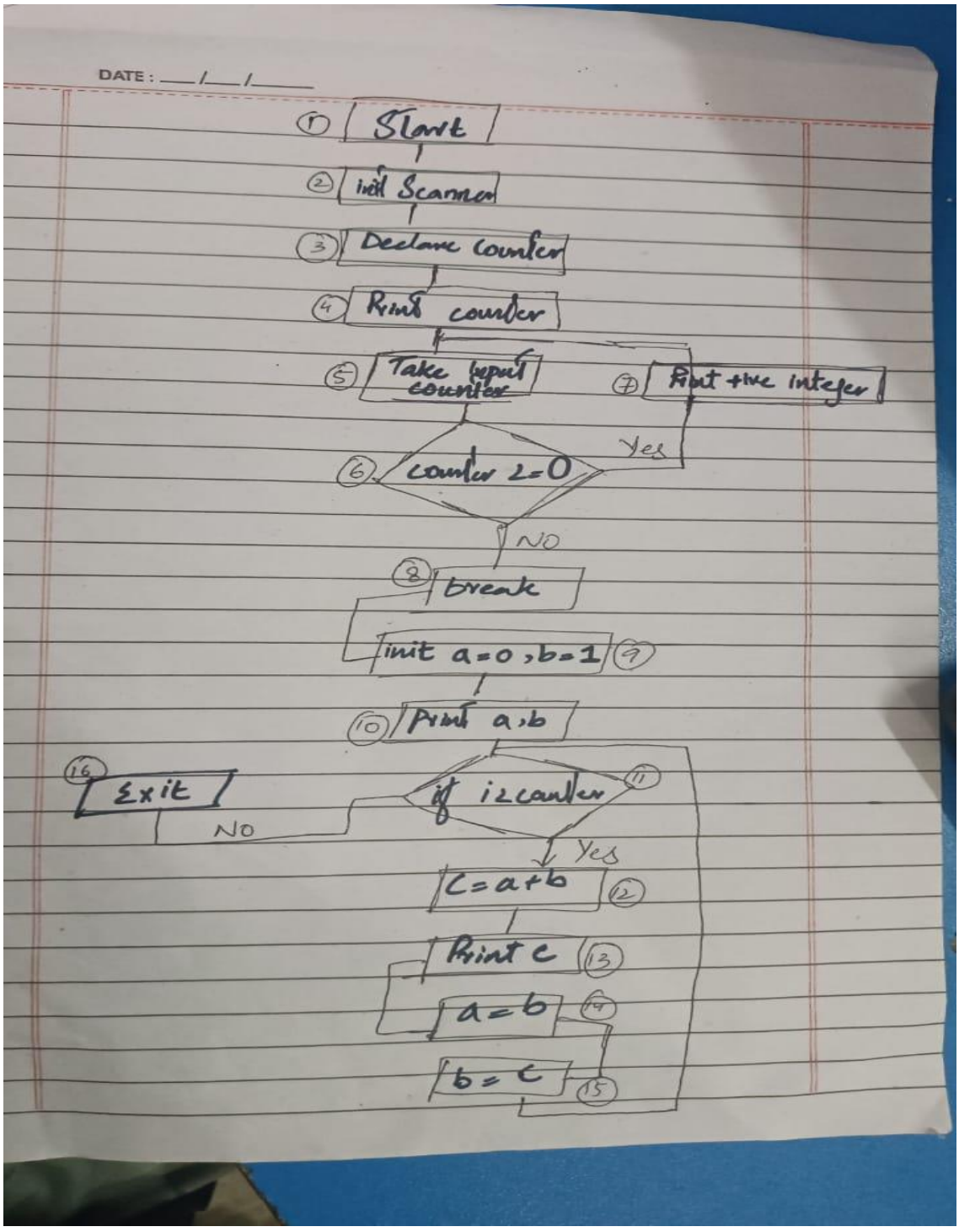
FIBONACCI SERIES

Code

```
import java.util.InputMismatchException;
import java.util.Scanner;

public class FibonacciSeries {

    public static void Fibonacci() {
        Scanner scanner = new Scanner(System.in);

        int counter;
        do {
            System.out.print("Enter the number of terms in the Fibonacci series: ");
            try {
                counter = scanner.nextInt();
                if (counter <= 0) {
                    System.out.println("Invalid input: Please enter a positive integer.");
                } else {
                    break;
                }
            } catch (InputMismatchException e) {
                System.out.println("Invalid input: Please enter a positive integer.");
                scanner.nextLine();
            }
        } while (true);

        int a = 0, b = 1;
```

```
        System.out.print(a + " " + b);
        for (int i = 2; i < counter; i++) {
            int c = a + b;
            System.out.print(" " + c);
            a = b;
            b = c;
        }
    }

    public static void main(String args[]) {
        FibonacciSeries fb = new FibonacciSeries();
        fb.Fibonacci();
    }
}
```

CFG



Paths

P1: 1,2,3,4,5,6,8,9,10,11,16.

P2: 1,2,3,4,5,6,7,5,6,8,9,10,11,16.

P3: 1,2,3,4,5,6,8,9,10,11,12,13,14,15,11,16.

P4: 1,2,3,4,5,6,7,5,6,8,9,10,11,12,13,14,15,11,16.

TestCase_ID	Description	Input data	Expected outcome	Actual outcome	status
Fb_01	Enter counter value >0	4	0,1,1,2 will be printed	Values are printed	Pass
Fb_02	Enter counter value =< 0	-9	Message: invalid input enter value again	Message is being printed	Pass
Fb_03	Enter counter value as character or string	heehaw	Message: invalid input enter value again	Message is being printed	Pass
Fb_04	Enter Counter value =1	1	Print 0 only	0,1 will be printed as (loop will not iterate)	fail