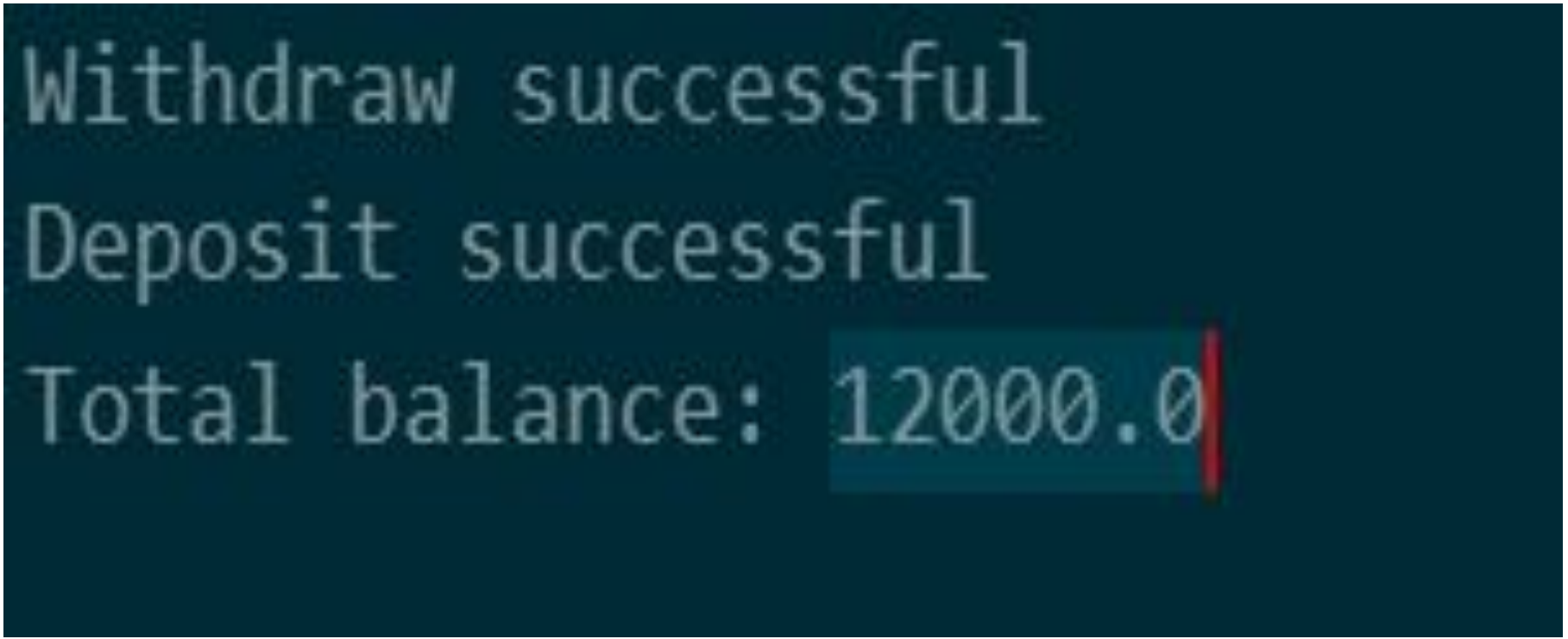
```
class Bank {
    private double amount;
    public Bank(double amount) {
        this.amount = amount;
    }
    // Method to withdraw amount
    public void withdraw(double withdrawalAmount) {
        // Using ternary operator to check if the withdrawal can be made
        String message = (amount >= withdrawalAmount) ? "Withdraw successful" : "Insufficient balance";
        if (amount >= withdrawalAmount) {
            amount -= withdrawalAmount;
        }
        System.out.println(message);
    }
    // Method to deposit amount
    public void deposit(double depositAmount) {
        amount += depositAmount;
        System.out.println("Deposit successful");
    }
    // Method to display balance
    public void displayBalance() {
        System.out.println("Total balance: " + amount);
    }
    public static void main(String[] args) {
        // Create a Bank object with initial amount of 10000
        Bank bankAccount = new Bank(10000);
        // Perform withdrawal of 3000
        bankAccount.withdraw(3000);
        // Perform deposit of 5000
        bankAccount.deposit(5000);
        // Display the final balance
        bankAccount.displayBalance();
    }
}
```

Question 1 OUTPUT :



```
import java.util.Scanner;
public class MaxOfTwoNumbers {
    public static void main(String[] args) {
        Scanner scanner = new Scanner(System.in);
        System.out.print("Enter the first number: ");
        int num1 = scanner.nextInt();
        System.out.print("Enter the second number: ");
        int num2 = scanner.nextInt();
        int max = (num1 > num2) ? num1 : num2;
        System.out.println("The maximum between " + num1 + " and " + num2 + " is: " + max);
        scanner.close();
    }
}
```

Question 2 OUTPUT :

```
PS C:\Users\Varun Pratap Chauhan\Desktop\AJP java> javac MaxOfTwoNumbers.java
PS C:\Users\Varun Pratap Chauhan\Desktop\AJP java> java MaxOfTwoNumbers
Enter the first number: 5
Enter the second number: 2
The maximum between 5 and 2 is: 5
```

```
public class CheckNthBit {
    public static void main(String[] args) {
        // Two arguments provided during compilation time
        if (args.length < 2) {
            System.out.println("Please provide two arguments: num and n.");
            return;
        }
        // Parse command line arguments as integer values
        int num = Integer.parseInt(args[0]);
        int n = Integer.parseInt(args[1]);
        // Check if the nth bit is set
        // We use a bitmask (1 << (n-1)) to isolate the nth bit (n starts from 1)
        boolean isNthBitSet = (num & (1 << (n - 1))) != 0;
        System.out.println("The " + n + "th bit of " + num + " is " + (isNthBitSet ? "set (1)" : "not set (0)"));
    }
}
```

Question 3 OUTPUT :

```
PS C:\Users\Varun Pratap Chauhan\Desktop\AJP java> javac CheckNthBit.java
PS C:\Users\Varun Pratap Chauhan\Desktop\AJP java> java CheckNthBit 10 2
The 2th bit of 10 is set (1)
```