Lab 4:

Assignment 1:

Write a Java program that allows the user to create a bank account and perform transactions such as deposit, such as deposit, withdrawal, and balance inquiry. Using a conditional operator (ternary operator) , display the message whether minimum balance is maintained or not.

Steps:

- Create a class BankAccount
- Add three member variables: String accountHolderName, int accountNumber and int balance;
- Add a constructor using all three members
- Add getters and setters.
- Add method deposit (int), withdraw(int)
- Implement the methods by increasing or decreasing the balance
- In the main method create a bank account
- Withdraw money from this account and/or deposit into this account. Get the balance
- Create a string variable “status” inside the main method
- Assign values to status as “Minimum Balance Maintained” if balance is above or equal to 5000. Otherwise values of status will be “Minimum Balance not Maintained”. Use conditional operator (ternary operator) to assign the values of the status.

Source Code:

```
// BankAccounrt1.java
class BankAccount1 {
        // Member variables
   private String accountHolderName;
   private int accountNumber;
   private int balance;

   // Constructor
   public BankAccount1(String accountHolderName, int accountNumber, int balance) {
      this.accountHolderName = accountHolderName;
      this.accountNumber = accountNumber;
      this.balance = balance;
   }

   // Getters and Setters
   public String getAccountHolderName() {
      return accountHolderName;
```

```
}

public void setAccountHolderName(String accountHolderName) {
   this.accountHolderName = accountHolderName;
}

public int getAccountNumber() {
   return accountNumber;
}

public void setAccountNumber(int accountNumber) {
   this.accountNumber = accountNumber;
}

public int getBalance() {
   return balance;
}

public void setBalance(int balance) {
   this.balance = balance;
}

// Deposit method
public void deposit(int amount) {
   if (amount > 0) {
      balance += amount;
      System.out.println(amount + " deposited. Current Balance: " + balance);
   } else {
      System.out.println("Invalid deposit amount.");
   }
}

// Withdraw method
public void withdraw(int amount) {
   if (amount > 0 && amount <= balance) {
      balance -= amount;
      System.out.println(amount + " withdrawn. Current Balance: " + balance);
   } else {
      System.out.println("Invalid withdrawal or insufficient funds.");
   }
}
```

```
// Main class

    public static void main(String[] args) {
        // Create a BankAccount object
        BankAccount1 account = new BankAccount1("Sneha", 10101, 4000);

        // Deposit and Withdraw operations
        account.deposit(2000);  // 4000 + 2000 = 6000
        account.withdraw(1000); // 6000 - 1000 = 5000

        // Get current balance
        int balance = account.getBalance();
        System.out.println("Final Balance: " + balance);

        // Use ternary operator for status
        String status = (balance >= 5000) ?
                        "Minimum Balance Maintained" :
                        "Minimum Balance Not Maintained";

        // Display status
        System.out.println("Account Holder: " + account.getAccountHolderName());
        System.out.println("Account Number: " + account.getAccountNumber());
        System.out.println("Status: " + status);
    }
}
```

Output: