

Session-3 Lab

ASSIGNMENT 07

```
package com.san.jay;
```

```
public class BankAccount {
```

```
    private String accountHolderName;
```

```
    private String bankName;
```

```
    private double accountBalance;
```

```
// Constructor
```

```
    public BankAccount(String accountHolderName, String bankName, double initialBalance) {
```

```
        this.accountHolderName = accountHolderName;
```

```
        this.bankName = bankName;
```

```
        this.accountBalance = initialBalance;
```

```
    }
```

```
// Method to get balance
```

```
    public double getBalance() {
```

```
        return accountBalance;
```

```
    }
```

```
// Method to deposit money
```

```
    public void deposit(double amount) {
```

```
        if (amount > 0) {
```

```
            accountBalance += amount;
```

```
            System.out.println(amount + " deposited into " + accountHolderName + " (" + bankName + ")");
```

```
        } else {
```

```
            System.out.println("Deposit amount must be positive.");
```

```
        }
```

```
    }
```

```
// Method to withdraw money
```

```
    public void withdraw(double amount) {
```

```
        if (amount > 0 && amount <= accountBalance) {
```

```
            accountBalance -= amount;
```

```
            System.out.println(amount + " withdrawn from " + accountHolderName + " (" + bankName + ")");
```

```
        } else {
```

```

        System.out.println("Insufficient balance or invalid withdrawal amount.");
    }
}

// Method to display account details

public void displayAccountDetails() {
    System.out.println("Account Holder: " + accountHolderName);
    System.out.println("Bank: " + bankName);
    System.out.println("Balance: " + accountBalance);
    System.out.println("*****");
}

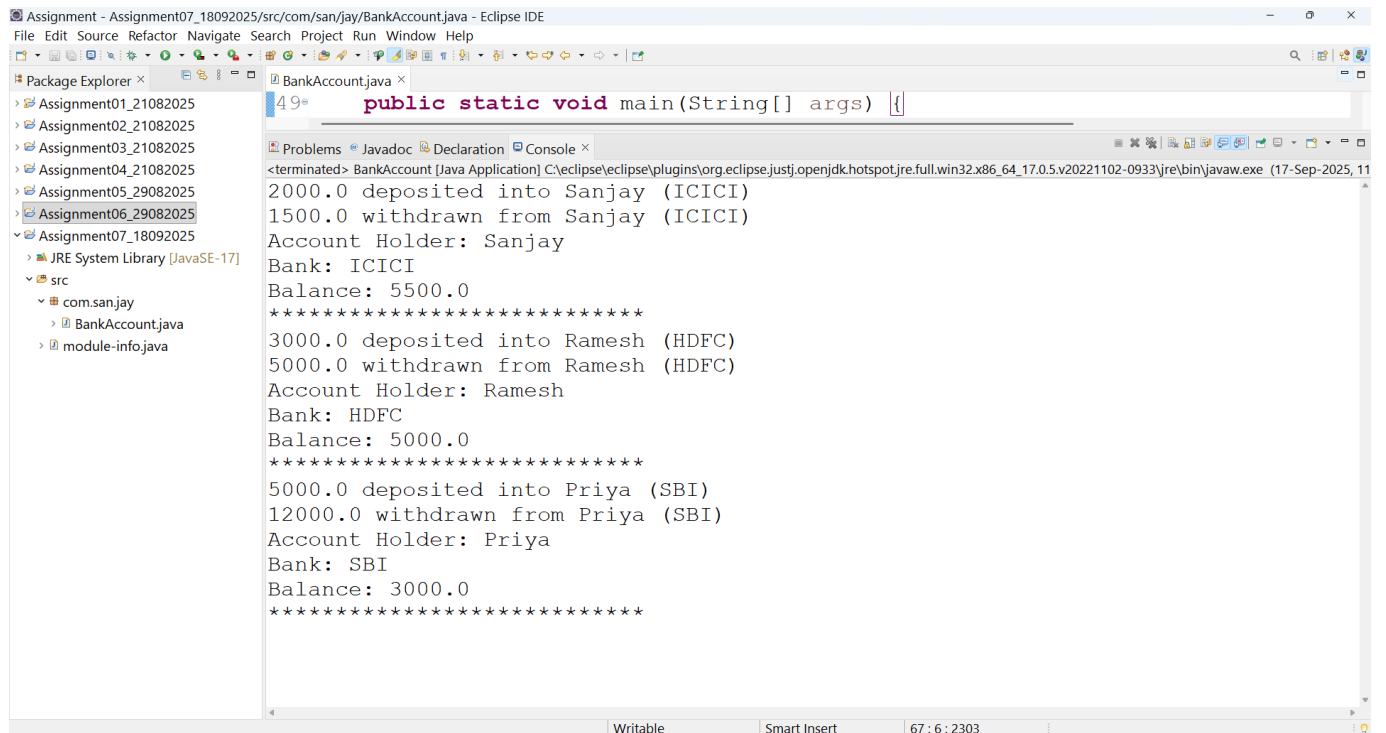
// Main method

public static void main(String[] args) {
    // Creating three bank accounts
    BankAccount acc1 = new BankAccount("Sanjay", "ICICI", 5000);
    BankAccount acc2 = new BankAccount("Ramesh", "HDFC", 7000);
    BankAccount acc3 = new BankAccount("Priya", "SBI", 10000);

    // Perform deposit and withdrawal
    acc1.deposit(2000);
    acc1.withdraw(1500);
    acc1.displayAccountDetails();
    acc2.deposit(3000);
    acc2.withdraw(5000);
    acc2.displayAccountDetails();
    acc3.deposit(5000);
    acc3.withdraw(12000); // Should show insufficient balance
    acc3.displayAccountDetails();
}
}

```

ASSIGNMENT 07 – OUTPUT



```
Assignment - Assignment07_18092025/src/com/san/jay/BankAccount.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer
  Assignment01_21082025
  Assignment02_21082025
  Assignment03_21082025
  Assignment04_21082025
  Assignment05_29082025
  Assignment06_29082025
  Assignment07_18092025
    JRE System Library [JavaSE-17]
    src
      com.san.jay
        BankAccount.java
        module-info.java

BankAccount.java
49 public static void main(String[] args) {

Problems Javadoc Declaration Console
<terminated> BankAccount [Java Application] C:\eclipse\eclipse\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_17.0.5.v20221102-0933\jre\bin\javaw.exe (17-Sep-2025, 11
2000.0 deposited into Sanjay (ICICI)
1500.0 withdrawn from Sanjay (ICICI)
Account Holder: Sanjay
Bank: ICICI
Balance: 5500.0
*****
3000.0 deposited into Ramesh (HDFC)
5000.0 withdrawn from Ramesh (HDFC)
Account Holder: Ramesh
Bank: HDFC
Balance: 5000.0
*****
5000.0 deposited into Priya (SBI)
12000.0 withdrawn from Priya (SBI)
Account Holder: Priya
Bank: SBI
Balance: 3000.0
*****

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```

ASSIGNMENT 08

package com.san.jay;

//superclass

public class Animals {

public void makeSound() {

 System.out.println("The animal makes a sound.");

 }

}

package com.san.jay;

//Subclass Dog

public class Dog **extends** Animals {

 @Override

public void makeSound() {

 System.out.println("The dog barks.");

 }

}

```

package com.san.jay;

//Subclass Cat

public class Cat extends Animals {

    @Override

    public void makeSound() {

        System.out.println("The cat meows.");

    }

}

package com.san.jay;

import java.util.Scanner;

//mainclass Animal test

public class AnimalTest {

    public static void main(String[] args) {

        Scanner scanner = new Scanner(System.in);

        System.out.println("Choose an animal (1. Animal, 2. Dog, 3. Cat): ");

        int choice = scanner.nextInt();

        Animals myAnimal; // Reference of superclass

        switch (choice) {

            case 1:

                myAnimal = new Animals();

                break;

            case 2:

                myAnimal = new Dog();

                break;

            case 3:

                myAnimal = new Cat();

                break;

            default:

                System.out.println("Invalid choice! Defaulting to Animal.");

                myAnimal = new Animals();

        }

        // Polymorphism in action

        myAnimal.makeSound();
    }
}

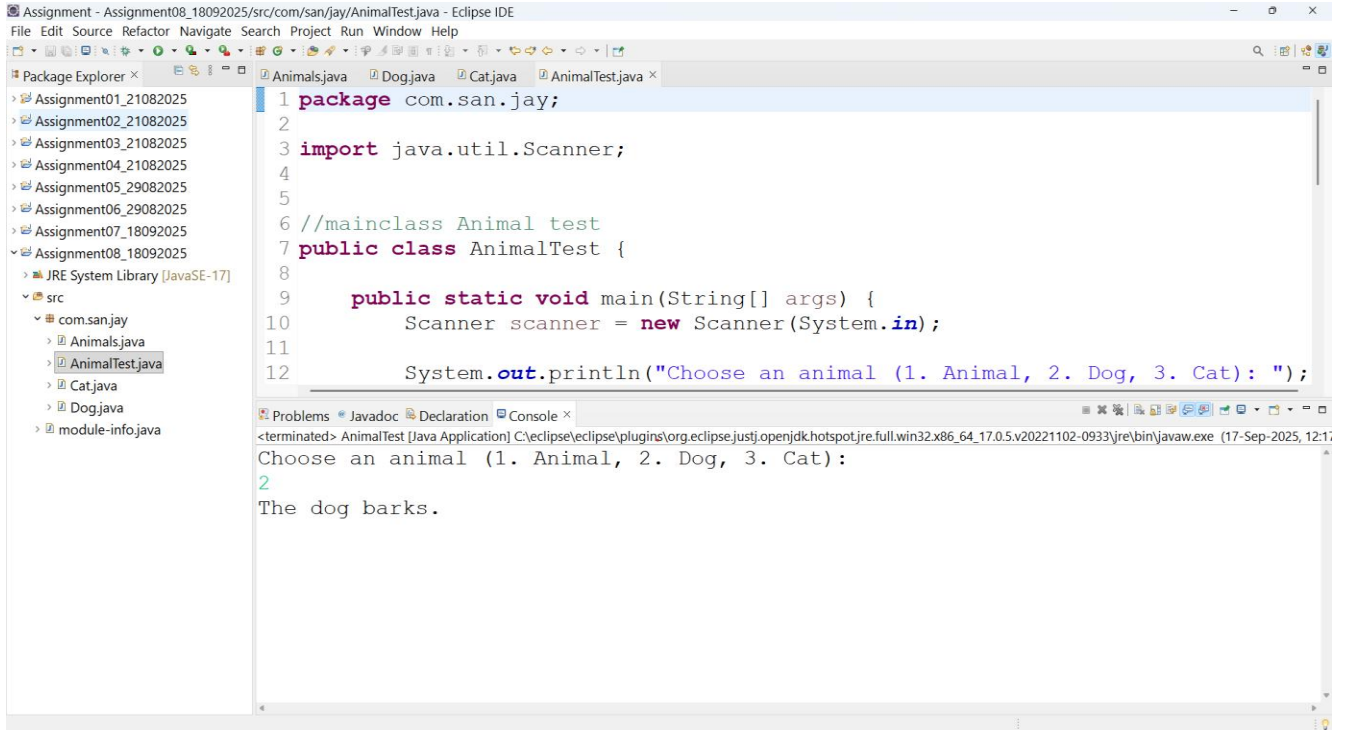
```

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

```
}
```

```
}
```

ASSIGNMENT 06 – OUTPUT



The screenshot shows the Eclipse IDE interface. The Package Explorer on the left displays the project structure, including the package `com.san.jay` and the class `AnimalTest.java`. The main editor window shows the source code of `AnimalTest.java`, which includes a package declaration, an import for `java.util.Scanner`, and a `main` method that prompts the user to choose an animal. The Console window at the bottom shows the output of the program, indicating that the user chose '2' (Dog) and the program printed 'The dog barks.'

```
1 package com.san.jay;
2
3 import java.util.Scanner;
4
5
6 //mainclass Animal test
7 public class AnimalTest {
8
9     public static void main(String[] args) {
10         Scanner scanner = new Scanner(System.in);
11
12         System.out.println("Choose an animal (1. Animal, 2. Dog, 3. Cat): ");
13
14         int choice = scanner.nextInt();
15
16         switch (choice) {
17             case 1:
18                 System.out.println("The animal is a cat.");
19                 break;
20             case 2:
21                 System.out.println("The dog barks.");
22                 break;
23             case 3:
24                 System.out.println("The animal is a dog.");
25                 break;
26             default:
27                 System.out.println("Invalid choice.");
28         }
29     }
30 }
```

Choose an animal (1. Animal, 2. Dog, 3. Cat):
2
The dog barks.