ASSIGNMENT – COURIER MANAGEMENT SYSTEM

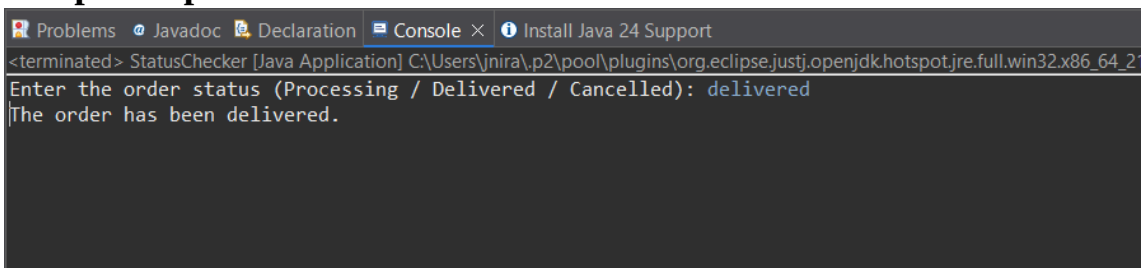
Coding

Task 1: Control Flow Statements

1. **Write a program that checks whether a given order is delivered or not based on its status (e.g., "Processing," "Delivered," "Cancelled"). Use if-else statements for this.**

```
import java.util.*;

public class StatusChecker {

        public static void main(String[] args) {
                Scanner sc = new Scanner(System.in);

        System.out.print("Enter the order status (Processing / Delivered / Cancelled): ");
        String status = sc.nextLine().trim().toLowerCase();

        if (status.equals("delivered")) {
            System.out.println("The order has been delivered.");
        } else if (status.equals("processing")) {
            System.out.println("The order is still being processed.");
        } else if (status.equals("cancelled")) {
            System.out.println("The order has been cancelled.");
        } else {
            System.out.println("Invalid status entered.");
        }

        sc.close();

          }

}
```

Sample output:

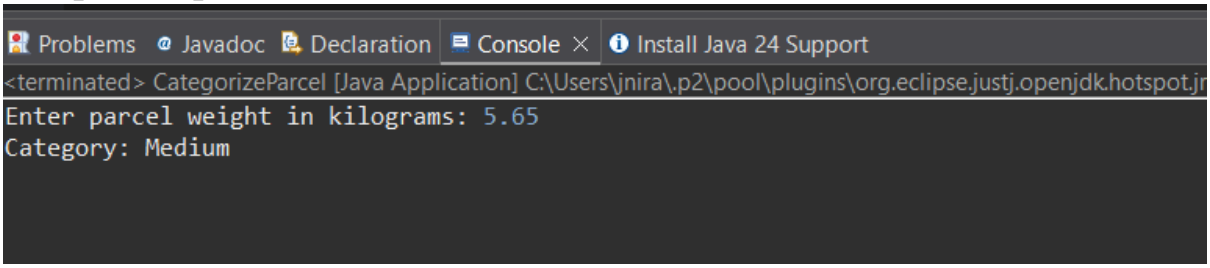


2. **Implement a switch-case statement to categorize parcels based on their weight into "Light," "Medium," or "Heavy."**

```
import java.util.*;

public class CategorizeParcel {

    public static void main(String[] args) {
        // TODO Auto-generated method stub
        Scanner sc = new Scanner(System.in);

System.out.print("Enter parcel weight in kilograms: ");
double weight = sc.nextDouble();


int category;

if (weight < 0) {
   category = -1;
} else if (weight <= 5) {
   category = 1; // Light
} else if (weight <= 10) {
   category = 2; // Medium
} else {
   category = 3; // Heavy
}

switch (category) {
   case 1:
      System.out.println("Category: Light");
      break;
   case 2:
      System.out.println("Category: Medium");
      break;
   case 3:
      System.out.println("Category: Heavy");
      break;
   default:
      System.out.println("Invalid weight entered.");
}
```

```
        sc.close();

          }

}
```

Sample Output:



3. **Implement User Authentication 1. Create a login system for employees and customers using Java control flow statements.**

```
import java.util.*;

public class UserAuthentication {

        public static void main(String[] args) {
                // TODO Auto-generated method stub
                Scanner sc = new Scanner(System.in);

        String empUsername = "employee123";
        String empPassword = "emp@123";

        String custUsername = "customer123";
        String custPassword = "cust@123";

        System.out.println("Login as:");
        System.out.println("1. Employee");
        System.out.println("2. Customer");
        System.out.print("Enter your choice (1 or 2): ");
        int choice = sc.nextInt();
        sc.nextLine();

        String username, password;

        if (choice == 1) {
           System.out.print("Enter Employee Username: ");
```

```
            username = sc.nextLine();
            System.out.print("Enter Employee Password: ");
            password = sc.nextLine();

            if (username.equals(empUsername) &&
password.equals(empPassword)) {
                System.out.println("Employee login successful.");
            } else {
                System.out.println("Invalid employee credentials.");
            }

        } else if (choice == 2) {
            System.out.print("Enter Customer Username: ");
            username = sc.nextLine();
            System.out.print("Enter Customer Password: ");
            password = sc.nextLine();

            if (username.equals(custUsername) &&
password.equals(custPassword)) {
                System.out.println("Customer login successful.");
            } else {
                System.out.println("Invalid customer credentials.");
            }

        } else {
            System.out.println("Invalid choice. Please select 1 or 2.");
        }

        sc.close();

          }

}
```

Sample Output:

```
<terminated> UserAuthentication [Java Application] C:\Users\jnira\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64_21.0.6.v20250130-0529\jre\bin\javaw.exe
Login as:
1. Employee
2. Customer
Enter your choice (1 or 2): 1
Enter Employee Username: employee123
Enter Employee Password: emp@123
Employee login successful.
```

4. **Implement Courier Assignment Logic 1. Develop a mechanism to assign couriers to shipments based on predefined criteria (e.g., proximity, load capacity) using loops.**

```
import java.util.*;

public class UserAuthentication {

        public static void main(String[] args) {
                // TODO Auto-generated method stub
                Scanner sc = new Scanner(System.in);

        String empUsername = "employee123";
        String empPassword = "emp@123";

        String custUsername = "customer123";
        String custPassword = "cust@123";

        System.out.println("Login as:");
        System.out.println("1. Employee");
        System.out.println("2. Customer");
        System.out.print("Enter your choice (1 or 2): ");
        int choice = sc.nextInt();
        sc.nextLine();

        String username, password;

        if (choice == 1) {
           System.out.print("Enter Employee Username: ");
           username = sc.nextLine();
           System.out.print("Enter Employee Password: ");
           password = sc.nextLine();

           if (username.equals(empUsername) &&
password.equals(empPassword)) {
              System.out.println("Employee login successful.");
           } else {
              System.out.println("Invalid employee credentials.");
           }
```

```
        } else if (choice == 2) {
            System.out.print("Enter Customer Username: ");
            username = sc.nextLine();
            System.out.print("Enter Customer Password: ");
            password = sc.nextLine();

            if (username.equals(custUsername) &&
password.equals(custPassword)) {
                System.out.println("Customer login successful.");
            } else {
                System.out.println("Invalid customer credentials.");
            }

        } else {
            System.out.println("Invalid choice. Please select 1 or 2.");
        }

        sc.close();

          }

}
```

Sample Output: