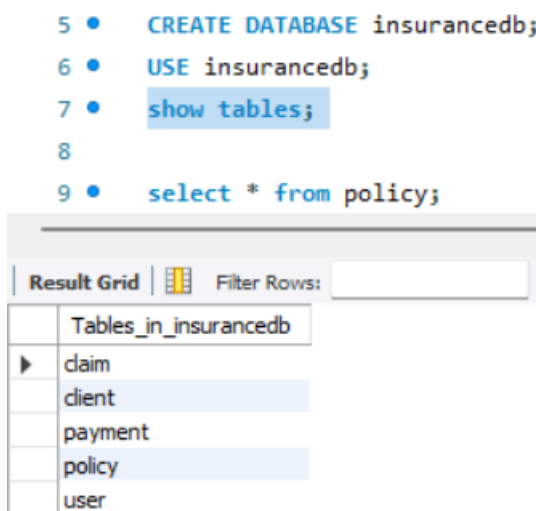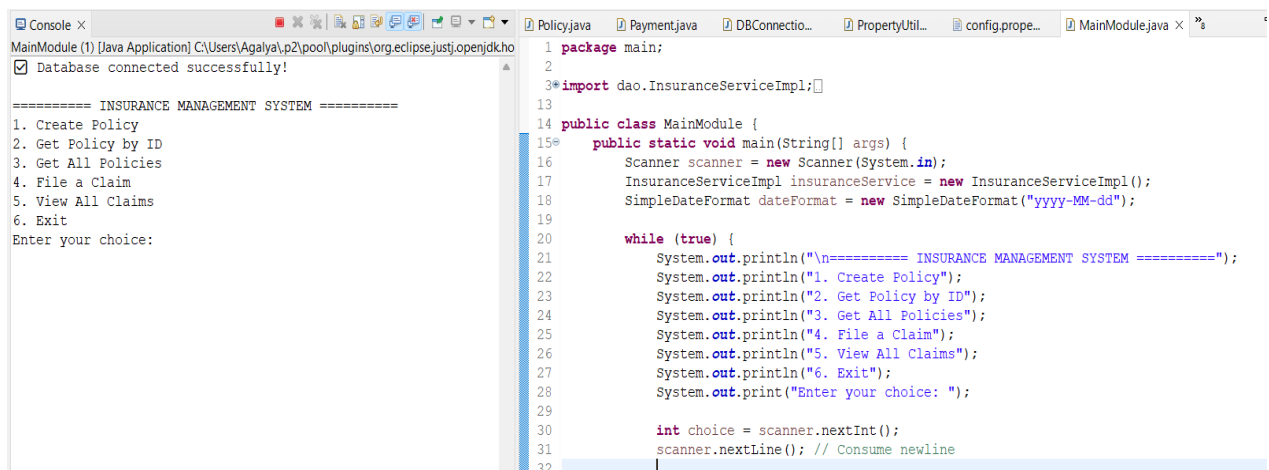# JAVA CODING CHALLENGE – **INSURANCE MANAGEMENT SYSTEM**

ScreenShots/Output:

1. Tables in "**insurancedb**" Database:

2. MainModule.java:

3. 1st Choice: **Create Policy**

```
Console ×
MainModule (1) [Java Application] C:\Users\Agalya\.p2\pool\plugins\org.eclipse.justj.openjdk.ho
☑ Database connected successfully!

========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Exit
Enter your choice: 1
Enter Policy ID: 1
Enter Policy Name: HealthCare Policy
Enter Premium Amount: 230000
☑ Policy created successfully!

========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Exit
```

```java
Policy.java    Payment.java    DBConnectio...    PropertyUtil...    config.prope...    MainModule
 1  package main;
 2
 3⊕ import dao.InsuranceServiceImpl;
13
14  public class MainModule {
15⊝     public static void main(String[] args) {
16          Scanner scanner = new Scanner(System.in);
17          InsuranceServiceImpl insuranceService = new InsuranceServiceImpl()
18          SimpleDateFormat dateFormat = new SimpleDateFormat("yyyy-MM-dd");
19
20          while (true) {
21              System.out.println("\n========== INSURANCE MANAGEMENT SYSTEM =
22              System.out.println("1. Create Policy");
23              System.out.println("2. Get Policy by ID");
24              System.out.println("3. Get All Policies");
25              System.out.println("4. File a Claim");
26              System.out.println("5. View All Claims");
27              System.out.println("6. Exit");
28              System.out.print("Enter your choice: ");
29
30              int choice = scanner.nextInt();
31              scanner.nextLine(); // Consume newline
32
```

```
========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Exit
Enter your choice: 1
Enter Policy ID: 2
Enter Policy Name: Gold Policy
Enter Premium Amount: 130000
☑ Policy created successfully!

========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Exit
Enter your choice: 1
Enter Policy ID: 3
Enter Policy Name: Employee Policy
Enter Premium Amount: 543200
☑ Policy created successfully!

========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Exit
Enter your choice: 1
Enter Policy ID: 4
Enter Policy Name: Agriculture Policy
Enter Premium Amount: 200000
☑ Policy created successfully!
```

⇨ Policies in the table:

```sql
 5 •    CREATE DATABASE insurancedb;
 6 •    USE insurancedb;
 7 •    show tables;
 8
 9 •    select * from policy;
10
11
```

Result Grid | Filter Rows:

policyId	policyName	premiumAmount
1	HealthCare Policy	230000
2	Gold Policy	130000
3	Employee Policy	543200
4	Agriculture Policy	200000
NULL	NULL	NULL

4. 2nd Choice: **Get Policy by Id**

```
MainModule (1) [Java Application] C:\Users\Agalya\.p2\pool\plugins\org.eclipse.justj.openjdk.hotspot.jre.fu
☑ Database connected successfully!

========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Exit
Enter your choice: 2
Enter Policy ID to search: 3
☑ Policy Found: Policy{policyId=3, policyName='Employee Policy'}

========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Exit
Enter your choice: 2
Enter Policy ID to search: 4
☑ Policy Found: Policy{policyId=4, policyName='Agriculture Policy'}

========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Exit
Enter your choice: 2
Enter Policy ID to search: 1
☑ Policy Found: Policy{policyId=1, policyName='HealthCare Policy'}
```

5. 3rd Choice: **Get all Policies**

```
========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Exit
Enter your choice: 3
☑ Available Policies:
Policy{policyId=1, policyName='HealthCare Policy'}
Policy{policyId=2, policyName='Gold Policy'}
Policy{policyId=3, policyName='Employee Policy'}
Policy{policyId=4, policyName='Agriculture Policy'}
```

6. 4ᵗʰ Choice: **File a Claim**

```
========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Exit
Enter your choice: 4
Enter Claim ID: 1
Enter Claim Number: 674531
Enter Claim Amount: 2430
Enter Claim Status: Medical Claim
Enter Date Filed (yyyy-MM-dd): 2025-03-21
Enter Policy ID Associated with Claim: 1
Enter Client ID Associated with Claim: 1
☑ Claim filed successfully!


========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Exit
Enter your choice: 4
Enter Claim ID: 2
Enter Claim Number: 745733
Enter Claim Amount: 13550
Enter Claim Status: Agri-raws
Enter Date Filed (yyyy-MM-dd): 2024-11-16
Enter Policy ID Associated with Claim: 4
Enter Client ID Associated with Claim: 3
☑ Claim filed successfully!
```

⇨ Claim informations in the table:

```
5 •    CREATE DATABASE insurancedb;
6 •    USE insurancedb;
7 •    show tables;
8
9 •    select * from claim;
10
11
```

claimId	claimNumber	dateFiled	claimAmount	status	policyId	clientId
2	674531	2025-03-21	2430	Medical Claim	1	1
3	745733	2024-11-16	13550	Agri-raws	4	3
NULL	NULL	NULL	NULL	NULL	NULL	NULL

7. 5th Choice: **View all claims**

```
========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Exit
Enter your choice: 5
☑ Available Claims:
Claim{claimId=2, claimNumber='674531', status='Medical Claim', policyId=1, clientId=1}
Claim{claimId=3, claimNumber='745733', status='Agri-raws', policyId=4, clientId=3}
```

8. 6th Choice: **Update the Policy**

```
========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Update Policy
7. Exit
Enter your choice: 3
☑ Available Policies:
Policy{policyId=1, policyName='HealthCare Policy'}
Policy{policyId=2, policyName='Business Policy'}
Policy{policyId=3, policyName='Employee Policy'}
Policy{policyId=4, policyName='Agriculture Policy'}
Policy{policyId=5, policyName='Vehicle Policy'}

========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Update Policy
7. Exit
Enter your choice: 6
Enter Policy ID to update: 3
Enter New Policy Name: Educational Policy
Enter New Premium Amount: 300000
☑ Policy updated successfully!
```

⇨ Updated Policy details:

```
========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Update Policy
7. Exit
Enter your choice: 3
☑ Available Policies:
Policy{policyId=1, policyName='HealthCare Policy'}
Policy{policyId=2, policyName='Business Policy'}
Policy{policyId=3, policyName='Educational Policy'}
Policy{policyId=4, policyName='Agriculture Policy'}
Policy{policyId=5, policyName='Vehicle Policy'}
```

9. 7th Choice: **Exit from the System**

```
========== INSURANCE MANAGEMENT SYSTEM ==========
1. Create Policy
2. Get Policy by ID
3. Get All Policies
4. File a Claim
5. View All Claims
6. Update Policy
7. Exit
Enter your choice: 7
🖉 Exiting Insurance Management System. Thank you!
```