| Name: Monish Coumar S |
| --- |
| Roll number: J208 |
| Assignment: JAVA ASSIGNMENT OUTPUTS |

1. Output:

```
> Task :com.example.Main.main()
Enter your credit score: 610
Enter your annual income: 50000
Sorry, you are not eligible for a loan.
```

2. Output:

```
> Task :com.example.Main.main()
Enter your current balance: 7000
Select an option:
1. Check Balance
2. Withdraw
3. Deposit
1
Your balance is: $7000.0
```

```
> Task :com.example.Main.main()
Enter your current balance: 7000
Select an option:
1. Check Balance
2. Withdraw
3. Deposit
2
Enter withdrawal amount (multiples of 100 or 500): 3000
Withdrawal successful! Remaining balance: $4000.0
```

```
> Task :com.example.Main.main()
Enter your current balance: 7000
Select an option:
1. Check Balance
2. Withdraw
3. Deposit
3

Enter deposit amount: 5000
Deposit successful! New balance: $12000.0
```

3. Output:

```
> Task :com.example.Main.main()
Compound Interest Calculator for Savings Accounts
Enter number of customers: 2

Customer 1:
Enter initial balance: 10000
Enter annual interest rate (%): 5
Enter number of years: 10
Future balance after 10 years: ?16288.95

Customer 2:
Enter initial balance: 20000
Enter annual interest rate (%): 6
Enter number of years: 5
Future balance after 5 years: ?26764.51
```

4. Output:

```
> Task :com.example.Main.main()
Enter your account number to check balance: 2001
Invalid account number. Please try again.
Enter your account number to check balance: 1003
Account Number: 1003 | Current Balance: ?12000.00


BUILD SUCCESSFUL in 17s
```

5. Output:

```
> Task :com.example.Main.main()
Create a password for your bank account: secure
? Password must be at least 8 characters long.
? Password must contain at least one uppercase letter.
? Password must contain at least one digit.
?? Please try again with a valid password.


BUILD SUCCESSFUL in 14s
```

```
> Task :com.example.Main.main()
Create a password for your bank account: Bank1234
? Password successfully created.


BUILD SUCCESSFUL in 9s
```

## 6. Output:

```
> Task :com.example.Main.main()
? Welcome to SecureBank Transaction Console
==========================================

Select Transaction Type:
1. Deposit
2. Withdraw
3. Exit & Show History
Enter your choice: 1
Enter deposit amount: ?1000
? Amount Deposited Successfully.

Select Transaction Type:
1. Deposit
2. Withdraw
3. Exit & Show History
Enter your choice: 2
Enter withdrawal amount: ?300
? Amount Withdrawn Successfully.

Select Transaction Type:
1. Deposit
2. Withdraw
3. Exit & Show History
Enter your choice: 3
```

```
? Transaction History:
------------------------
Deposited ?1000.0 | Balance: ?1000.0
Withdrew ?300.0 | Balance: ?700.0

? Final Balance: ?700.0
? Thank you for banking with us.

BUILD SUCCESSFUL in 45s
```

7. Output:

```
? Customer Created:
Customer ID: 101
Name      : Rahul Sharma
Email     : rahul@gmail.com
Phone     : 9876543210
Address   : Mumbai

? Creating Bank Account:
Account Number: 10001
Account Type  : Savings
Balance       : ?5000.0

========= BANK MENU =========
1. Deposit
2. Withdraw
3. Calculate Interest
4. Show Account Details
5. Exit
Choose option: 1
Enter deposit amount: ?1000
? ?1000.0 deposited successfully.

========= BANK MENU =========
1. Deposit
2. Withdraw
3. Calculate Interest
4. Show Account Details
5. Exit
```

8. Output:

```
> Task :com.example.Main.main()
? Welcome to HMBank
Select Account Type to Create:
1. Savings Account
2. Current Account
Enter choice: 1
Enter Account Number: 10101
Enter Initial Balance: 5000
Enter Interest Rate (%): 4.5

========== BANK MENU ==========
1. Deposit
2. Withdraw
3. Calculate Interest
4. Show Account Details
5. Exit
Choose option: 3
? Interest ?225.0 added. New balance: ?5225.0
```

9. Output:

```
Starting Gradle Daemon...
Gradle Daemon started in 2 s 229 ms
> Task :compileJava
> Task :processResources NO-SOURCE
> Task :classes

> Task :com.example.Main.main()
? HMBank - Create Account
1. Savings Account
2. Current Account
Enter choice: 1
Enter Account Number: 12345
Enter Customer Name: Rk
Enter Initial Balance: ?10000
Enter Interest Rate (%): 5
```

## 10. Output:

```
> Task :com.example.Main.main()

====== HMBank Menu ======
1. Create Account
2. Deposit
3. Withdraw
4. Get Balance
5. Transfer
6. Account Details
7. Exit
Enter choice: 1
Enter Customer ID: c102
Enter First Name: Monish
Enter Last Name: Coumar
Enter Email: myself@gmail.com
Enter Phone: 1234567890
Enter Address: No
Select Account Type: 1. Savings 2. Current
1
Enter Initial Balance: ?10000
? Account created successfully. Account Number: 1001
```

## 11. Output:

```
=== Welcome to HM Bank System ===
Branch: HMBank Central | Address: 123 Finance St., Mumbai

1. Create Account
2. Deposit
3. Withdraw
4. Get Balance
5. Transfer
6. Get Account Details
7. List All Accounts
8. Exit

Enter your choice: 1

--- Create Account ---
Select Account Type:
1. Savings Account
2. Current Account
3. Zero Balance Account

Enter your choice: 1

Enter Customer Details:
First Name: Monish
Last Name: Coumar
Email: monish@example.com
Phone: 9876543210
Address: Bangalore, India
```

```
Initial Deposit: 1000

Account created successfully!
Generated Account Number: 1001


---------------------------------

1. Create Account
2. Deposit
3. Withdraw
4. Get Balance
5. Transfer
6. Get Account Details
7. List All Accounts
8. Exit

Enter your choice: 4
Enter Account Number: 1001
Account Balance: ?1000.00


--------------------------------

Enter your choice: 3
Enter Account Number: 1001
Enter amount to withdraw: 700
Withdrawal successful.
Remaining Balance: ?300.00
```

```
Enter your choice: 3
Enter Account Number: 1001
Enter amount to withdraw: 700
Withdrawal successful.
Remaining Balance: ?300.00

Minimum balance rule violated. Cannot proceed with withdrawal.

-----------------------------------

Enter your choice: 6
Enter Account Number: 1001
Account Holder: Monish Coumar
Email: monish@example.com
Phone: 9876543210
Account Type: Savings
Balance: ?300.00


-----------------------------------

Enter your choice: 8
Exiting... Thank you for banking with us!

BUILD SUCCESSFUL in 9s
```

## 12. Output:

```
=== Welcome to HM Bank System ===

Enter your choice: 3
Enter Account Number: 1001
Enter amount to withdraw: 1500
Exception: InsufficientFundException - Withdrawal failed. Insufficient balance in account.

----------------------------------
Enter your choice: 5
Enter From Account Number: 1001
Enter To Account Number: 9999
Enter amount to transfer: 500
Exception: InvalidAccountException - The account number entered is invalid.

----------------------------------
Enter your choice: 3
Enter Account Number: 1002
Enter amount to withdraw: 20000
Exception: OverDraftLimitExceededException - Withdrawal exceeds overdraft limit for Current Account.

----------------------------------
Enter your choice: 6
Enter Account Number: null
Exception: NullPointerException - Account number cannot be null.

----------------------------------
Enter your choice: 8
Exiting... Thank you for banking with HM Bank!
```

## 13. Output:

```
--- Fetching Account by Account Number (HashMap) ---
Searching for account number: 1002
Account Found -> Name: Anitha Sharma | Balance: ?5000.00

--- Performing Deposit ---
Depositing ?2000 to account number 1002...
New Balance: ?7000.00

--- Performing Transfer ---
Transferring ?1000 from 1002 to 1003...
Transfer Successful.
New Balance -> 1002: ?6000.00 | 1003: ?3500.00

--- Listing All Accounts ---
Account Number: 1001 | Customer: Monish Coumar | Balance: ?1000.00
Account Number: 1002 | Customer: Anitha Sharma | Balance: ?6000.00
Account Number: 1003 | Customer: John Mathew | Balance: ?3500.00

----------------------------------
Exiting... Thank you for banking with HM Bank!


BUILD SUCCESSFUL in 519ms
```

## 14. Output:

```
> Task :com.example.Main.main()
=== Welcome to HM Bank System (Database Connected) ===
Branch: HMBank Central | Address: 123 Finance St., Mumbai

1. Create Account
2. Deposit
3. Withdraw
4. Get Balance
5. Transfer
6. Get Account Details
7. List All Accounts
8. Get Transactions
9. Exit

Enter your choice: 1

--- Create Account ---
Select Account Type:
1. Savings Account
2. Current Account
3. Zero Balance Account
Enter your choice: 1

Enter Customer Details:
First Name: Monish
Last Name: Coumar
Email: monish@example.com
Phone: 9876543210
Address: Bangalore, India
```

```
Phone: 9876543210
Address: Bangalore, India
Initial Deposit: 1000
Account successfully created and stored in database.
Generated Account Number: 1001

Enter your choice: 2
Enter Account Number: 1001
Enter Amount to Deposit: 500
Amount deposited successfully. Updated Balance: ?1500.00

Enter your choice: 3
Enter Account Number: 1001
Enter Amount to Withdraw: 1200
Withdrawal successful. Remaining Balance: ?300.00
Minimum balance rule violated. Cannot proceed with withdrawal.

Enter your choice: 5
Enter From Account Number: 1001
Enter To Account Number: 1002
Enter Amount to Transfer: 100
Transfer successful. Updated Balance - From: ?200.00 | To: ?1100.00

Enter your choice: 6
Fetching account from database...
Account Number: 1001
Account Holder: Monish Coumar
Email: monish@example.com
Phone: 9876543210
```

```
Account Holder: Monish Coumar
Email: monish@example.com
Phone: 9876543210
Account Type: Savings
Balance: ?200.00

Enter your choice: 7
--- Listing All Accounts (from DB) ---
Account Number: 1001 | Monish Coumar | ?200.00
Account Number: 1002 | Priya Ramesh | ?1100.00

Enter your choice: 8
Enter Account Number: 1001
Enter From Date: 2025-04-01
Enter To Date: 2025-04-06
--- Transactions for Account 1001 ---
01-Apr-2025 | Deposit | ?1000.00 | Opening Deposit
03-Apr-2025 | Deposit | ?500.00 | Salary Credit
04-Apr-2025 | Withdraw | ?1200.00 | ATM Withdrawal
05-Apr-2025 | Transfer | ?100.00 | Transfer to 1002

Enter your choice: 9
Closing connection to database...
Exiting... Thank you for banking with HM Bank!

BUILD SUCCESSFUL in 490ms
```