

## **BANKING SYSTEM – CONTROL STRUCTURE**

### **TASK 4: LOOPING , ARRAY AND DATA VALIDATION**

#### **Customer Data Input & Storage**

- The program first asks the user to enter the number of customers.
- It then loops n times to get each customer's account number and balance, storing them in arrays.

#### **Validating & Retrieving Account Balance:**

- The program enters a loop asking the user to enter an account number.
- It checks if the entered account number exists in the Array.
- If valid, it prints the account balance and exits the loop.
- If invalid, it prompts the user again.

#### **JAVA PROGRAM:**

```
import java.util.*;
public class Task4 {
    public static void main(String[] args){
        Scanner sc = new Scanner(System.in);

        System.out.println("Enter number of customers:");
        int n = sc.nextInt();
        sc.nextLine();

        String[] accountNumbers = new String[n];
        double[] balances = new double[n];
        for(int i = 0; i < n; i++){
            System.out.print("Enter account number " + (i + 1) + ": ");
            accountNumbers[i] = sc.nextLine();
            System.out.print("Enter balance amount: ");
            balances[i] = sc.nextDouble();
            sc.nextLine();
        }
        while(true){
            System.out.println("Enter account number to check balance:");
            String accountNum = sc.nextLine();

            boolean found = false;
            for(int i = 0; i < n; i++){
                if(accountNumbers[i].equals(accountNum)){
                    System.out.printf("Account Balance: %.2f \n", balances[i]);
                    found = true;
                    break;
                }
            }

            if(found) break;
        }
    }
}
```

```
        else System.out.println("Invalid account number");
    }
}
}
```

### **OUTPUT:**

```
Enter number of customers
2
Enter account number 1:1234
Enter balance amt: 5000
Enter account number 2:5678
Enter balance amt: 6000
Enter account number to check balance:
1234
Account Balance: 5000.00
BUILD SUCCESSFUL (total time: 22 seconds)
```

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```
Enter number of customers
2
Enter account number 1:1234
Enter balance amt: 5000
Enter account number 2:5678
Enter balance amt: 6000
Enter account number to check balance:
3456
Invalid account number
Enter account number to check balance:
1234
Account Balance: 5000.00
BUILD SUCCESSFUL (total time: 1 minute 12 seconds)
```

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