BANKING SYSTEM-CONTROL STRUCTURE

TASK 3:LOOP STRUCTURES:

- **Taking Input for Multiple Customers:**
  - The program first asks the user to enter the **number of customers** whose savings accounts need to be processed.
  - It then iterates through a **for loop** to process each customer's details.
- **Loop Structure (For Loop):**
  - The **for loop** runs from `1` to the number of customers (`customers`).
  - For each iteration:
    - The user is prompted to enter:
      - **Initial balance**
      - **Annual interest rate** (percentage)
      - **Number of years**
- **Calculation Using the Compound Interest Formula**
- **Displaying the Result:**
  - The **future balance** is displayed using `printf()` with **two decimal places** for proper formatting.

JAVA PROGRAM:

```
import java.util.*;
public class Task3 {
   public static void main(String[] args){
      Scanner sc=new Scanner(System.in);
      System.out.println("Enter number of Customers");
      int n=sc.nextInt();
      for(int i=1;i<=n;i++){
         System.out.println("Customer "+i+":");
         System.out.println("Enter initial balance");
         double balance=sc.nextDouble();
         System.out.println("Enter Interest Rate: ");
         double rate=sc.nextDouble();
         System.out.println("Enter Number of years");
         int year=sc.nextInt();
         double amt=balance*Math.pow((1+rate/100),year);
         System.out.printf("Future balance: %.2f",amt);
         System.out.println();
      }
   }

}
```

OUTPUT:

```
Enter number of Customers
2
Customer 1:
Enter initial balance
5000
Enter Interest Rate:
5
Enter Number of years
2
Future balance: 5512.50
Customer 2:
Enter initial balance
6000
Enter Interest Rate:
3
Enter Number of years
5
Future balance: 6955.64
BUILD SUCCESSFUL (total time: 19 seconds)
```