2a.Write a Menu driven program in java to implement simple banking application. Application should read the customer name, account number, initial balance, rate of interest, contact number and address field etc. Application should have following methods. 1. createAccount() 2. deposit() 3. withdraw() 4. computeInterest() 5. displayBalance()

**CODE : -**

**import *java.util.Scanner*;**

***public class* SimpleBankingApplication{ *static* Scanner sc = new Scanner(System.in); *private static* String customerName;**

***private static* int accountNumber; *private static* double balance; *private static* double rateOfInterest; *private static* String contactNumber; *private static* String address;**

***public static* void main(String[] args) { int choice;**

**do {**

**System.out.println("\n\*\*\*\*\*\*\*\*\*\* Banking Application \*\*\*\*\*\*\*\*\*\*"); System.out.println("1. Create Account");**

**System.out.println("2. Deposit"); System.out.println("3. Withdraw");**

**System.out.println("4. Compute Interest"); System.out.println("5. Display Balance"); System.out.println("6. Exit"); System.out.print("Enter your choice: "); choice = sc.nextInt();**

**switch (choice) {**

**case 1:**

**createAccount(); break;**

**case 2:**

**deposit(); break; case 3:**

**withdraw(); break;**

**case 4:**

**computeInterest(); break;**

**case 5:**

**displayBalance(); break;**

**case 6:**

**System.out.println("Thank you for using our Banking Application!"); break;**

**default:**

**System.out.println("Invalid choice! Please try again."); break;**

**}**

**} while (choice != 6);**

**}**

***private static* void createAccount() { System.out.println("\n\*\*\*\*\*\*\*\*\*\* Create Account \*\*\*\*\*\*\*\*\*\*"); System.out.print("Enter customer name: ");**

**customerName =sc.next(); System.out.print("Enter account number: ");**

accountNumber = sc.nextInt(); System.out.print("Enter initial balance: "); balance = sc.nextDouble(); System.out.print("Enter rate of interest: "); rateOfInterest = sc.nextDouble();

System.out.print("Enter contact number: "); contactNumber = sc.next();

sc.nextLine(); System.out.print("Enter address: "); address = sc.nextLine();

System.out.println("Account created successfully!");

}

*private static* void deposit() { System.out.println("\n\*\*\*\*\*\*\*\*\*\* Deposit \*\*\*\*\*\*\*\*\*\*"); System.out.print("Enter the amount to deposit: ");

double amount = sc.nextDouble(); balance = balance + amount;

System.out.println("Deposit successful!");

}

*private static* void withdraw() { System.out.println("\n\*\*\*\*\*\*\*\*\*\* Withdraw \*\*\*\*\*\*\*\*\*\*"); System.out.print("Enter the amount to withdraw: ");

double amount = sc.nextDouble(); if (balance >= amount) {

balance -= amount; System.out.println("Withdrawal successful!");

} else {

System.out.println("Insufficient balance! Withdrawal failed.");

}

}

*private static* void computeInterest() {

System.out.println("\n\*\*\*\*\*\*\*\*\*\* Compute Interest \*\*\*\*\*\*\*\*\*\*"); System.out.print("Enter the time period (in years): ");

double timePeriod = sc.nextDouble();

double interest = (balance \* rateOfInterest \* timePeriod) / 100; balance += interest;

System.out.println("Interest computed and added to the balance!");

}

*private static* void displayBalance() { System.out.println("\n\*\*\*\*\*\*\*\*\*\* Display Balance \*\*\*\*\*\*\*\*\*\*"); System.out.println("Customer Name: " + customerName); System.out.println("Account Number: " + accountNumber); System.out.println("Current Balance: " + balance); System.out.println("Contact Number: " + contactNumber); System.out.println("Address: " + address);

}

}