**REALLIFEJAVAPROGRAMMS**

1. BankingSystem.java

import java.util.Scanner;

class BankingSystem {

private double balance = 1000;

void deposit(double amount) {

balance += amount;

System.out.println("Deposited: " + amount);

}

void withdraw(double amount) {

if (amount <= balance) {

balance -= amount;

System.out.println("Withdrawn: " + amount);

} else {

System.out.println("Insufficient balance.");

}

}

void checkBalance() {

System.out.println("Current Balance: " + balance);

}

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

BankingSystem bank = new BankingSystem();

int choice;

do {

System.out.println("\n1. Deposit\n2. Withdraw\n3. Check Balance\n4. Exit");

choice = sc.nextInt();

switch (choice) {

case 1:

System.out.print("Enter amount to deposit: ");

bank.deposit(sc.nextDouble());

break;

case 2:

System.out.print("Enter amount to withdraw: ");

bank.withdraw(sc.nextDouble());

break;

case 3:

bank.checkBalance();

break;

case 4:

System.out.println("Thank you for using Banking System.");

break;

default:

System.out.println("Invalid option.");

}

} while (choice != 4);

sc.close();

}

}

2. StudentGradeCalculator.java

import java.util.Scanner;

public class StudentGradeCalculator {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

int totalSubjects = 5;

int[] marks = new int[totalSubjects];

int total = 0;

for (int i = 0; i < totalSubjects; i++) {

System.out.print("Enter marks for subject " + (i + 1) + ": ");

marks[i] = sc.nextInt();

total += marks[i];

}

double average = total / (double) totalSubjects;

System.out.println("Total Marks: " + total);

System.out.println("Average: " + average);

if (average >= 90)

System.out.println("Grade: A");

else if (average >= 75)

System.out.println("Grade: B");

else if (average >= 60)

System.out.println("Grade: C");

else if (average >= 40)

System.out.println("Grade: D");

else

System.out.println("Grade: F");

sc.close();

}

}

3. ATMSystem.java

import java.util.Scanner;

public class ATMSystem {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

int balance = 5000, withdraw, deposit;

int pin = 1234;

System.out.print("Enter your PIN: ");

if (sc.nextInt() != pin) {

System.out.println("Incorrect PIN. Exiting...");

return;

}

while (true) {

System.out.println("\nATM Menu:");

System.out.println("1. Withdraw");

System.out.println("2. Deposit");

System.out.println("3. Check Balance");

System.out.println("4. Exit");

int choice = sc.nextInt();

switch (choice) {

case 1:

System.out.print("Enter amount to withdraw: ");

withdraw = sc.nextInt();

if (balance >= withdraw) {

balance -= withdraw;

System.out.println("Please collect your money");

} else {

System.out.println("Insufficient Balance");

}

break;

case 2:

System.out.print("Enter amount to deposit: ");

deposit = sc.nextInt();

balance += deposit;

System.out.println("Your money has been successfully deposited");

break;

case 3:

System.out.println("Balance: " + balance);

break;

case 4:

System.out.println("Thank you for using the ATM!");

sc.close();

return;

default:

System.out.println("Invalid choice");

}

}

}

}

4. ElectricityBillCalculator.java

import java.util.Scanner;

public class ElectricityBillCalculator {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter units consumed: ");

int units = sc.nextInt();

double bill = 0;

if (units <= 100) {

bill = units \* 5;

} else if (units <= 200) {

bill = 100 \* 5 + (units - 100) \* 7;

} else {

bill = 100 \* 5 + 100 \* 7 + (units - 200) \* 10;

}

System.out.println("Total electricity bill: ₹" + bill);

sc.close();

}

}

5. OnlineShoppingSystem.java

import java.util.Scanner;

public class OnlineShoppingSystem {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

int total = 0, choice, quantity;

do {

System.out.println("\n1. Shoes - ₹2000\n2. T-shirt - ₹500\n3. Jeans - ₹1200\n4. Checkout");

System.out.print("Enter your choice: ");

choice = sc.nextInt();

switch (choice) {

case 1:

System.out.print("Enter quantity: ");

quantity = sc.nextInt();

total += 2000 \* quantity;

break;

case 2:

System.out.print("Enter quantity: ");

quantity = sc.nextInt();

total += 500 \* quantity;

break;

case 3:

System.out.print("Enter quantity: ");

quantity = sc.nextInt();

total += 1200 \* quantity;

break;

case 4:

System.out.println("Total bill: ₹" + total);

break;

default:

System.out.println("Invalid choice");

}

} while (choice != 4);

sc.close();

}

}

6. LibraryManagement.java

import java.util.Scanner;

public class LibraryManagement {

static int totalBooks = 100;

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

int choice;

do {

System.out.println("\nLibrary Menu:");

System.out.println("1. Issue Book");

System.out.println("2. Return Book");

System.out.println("3. Check Availability");

System.out.println("4. Exit");

System.out.print("Enter your choice: ");

choice = sc.nextInt();

switch (choice) {

case 1:

if (totalBooks > 0) {

totalBooks--;

System.out.println("Book issued successfully.");

} else {

System.out.println("No books available.");

}

break;

case 2:

totalBooks++;

System.out.println("Book returned successfully.");

break;

case 3:

System.out.println("Books available: " + totalBooks);

break;

case 4:

System.out.println("Exiting library system.");

break;

default:

System.out.println("Invalid option.");

}

} while (choice != 4);

sc.close();

}

}

7. TemperatureConverter.java

import java.util.Scanner;

public class TemperatureConverter {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.println("Temperature Converter");

System.out.print("Enter temperature in Celsius: ");

double celsius = sc.nextDouble();

double fahrenheit = (celsius \* 9/5) + 32;

System.out.println("Temperature in Fahrenheit: " + fahrenheit);

sc.close();

}

}

8. SimpleCalculator.java

import java.util.Scanner;

public class SimpleCalculator {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

double num1, num2;

char operator;

System.out.print("Enter first number: ");

num1 = sc.nextDouble();

System.out.print("Enter operator (+, -, \*, /): ");

operator = sc.next().charAt(0);

System.out.print("Enter second number: ");

num2 = sc.nextDouble();

switch (operator) {

case '+':

System.out.println("Result: " + (num1 + num2));

break;

case '-':

System.out.println("Result: " + (num1 - num2));

break;

case '\*':

System.out.println("Result: " + (num1 \* num2));

break;

case '/':

if (num2 != 0)

System.out.println("Result: " + (num1 / num2));

else

System.out.println("Cannot divide by zero");

break;

default:

System.out.println("Invalid operator");

}

sc.close();

}

}

9. VotingEligibilityChecker.java

import java.util.Scanner;

public class VotingEligibilityChecker {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter your age: ");

int age = sc.nextInt();

if (age >= 18) {

System.out.println("You are eligible to vote.");

} else {

System.out.println("You are NOT eligible to vote.");

}

sc.close();

}

}

10. BMI\_Calculator.java

import java.util.Scanner;

public class BMI\_Calculator {

public static void main(String[] args) {

Scanner sc = new Scanner(System.in);

System.out.print("Enter weight in kg: ");

double weight = sc.nextDouble();

System.out.print("Enter height in meters: ");

double height = sc.nextDouble();

double bmi = weight / (height \* height);

System.out.println("Your BMI: " + bmi);

if (bmi < 18.5)

System.out.println("Underweight");

else if (bmi < 25)

System.out.println("Normal weight");

else if (bmi < 30)

System.out.println("Overweight");

else

System.out.println("Obese");

sc.close();

}

}