LAB 1 –

Q2.

import java.util.Scanner;

class InsufficientFundsException extends Exception {

public InsufficientFundsException(String message) {

super(message);

}

}

class BankAccount {

private double balance;

public BankAccount(double initialBalance) {

this.balance = initialBalance;

}

public void deposit(double amount) {

if (amount <= 0) {

System.out.println("Invalid deposit amount.");

return;

}

balance += amount;

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

}

public void withdraw(double amount) throws InsufficientFundsException {

if (amount > 10000) {

System.out.println("overdrawing!!!!!! \n Please enter amount under 10000");

return;

}

if (balance < amount) {

throw new InsufficientFundsException("Insufficient funds. Withdrawal failed.");

}

balance -= amount;

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

}

public double getBalance() {

return balance;

}

}

public class SimpleBankingApp {

public static void main(String[] args) {

Scanner = new Scanner(System.in);

System.out.print("Enter initial balance: ");

double initialBalance = scanner.nextDouble();

BankAccount account = new BankAccount(initialBalance);

boolean running = true;

while (running) {

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

System.out.print("Choose an option: ");

int choice = scanner.nextInt();

switch (choice) {

case 1:

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

double depositAmount = scanner.nextDouble();

account.deposit(depositAmount);

break;

case 2:

System.out.print("Enter withdrawal amount: ");

double withdrawalAmount = scanner.nextDouble();

try {

account.withdraw(withdrawalAmount);

} catch (InsufficientFundsException e) {

System.out.println("Error: " + e.getMessage());

}

break;

case 3:

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

break;

case 4:

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

running = false;

break;

default:

System.out.println("Invalid option. Please choose again.");

break;

}

}

scanner.close();

}

}

OUTPUT –

