BANK PROGRAM
WEEK 6

INPUT:

```java
import java.util.Scanner;

class account {
    String Name;
    int Acc_num;
    String Acc_type;
}

class sav_acc extends account {
    double balance;

    sav_acc(String N, int An, String At, double B) {
    Name = N;
    Acc_num = An;
    Acc_type = At;
    balance = B;
    }

    Scanner ss = new Scanner(System.in);

    void deposit(int val) {
```

```java
        balance += val;

    }

    void display_bal() {
    System.out.println("YOUR BALANCE IS: " + balance);
    }

    void deposit_interest() {
    double interest_rate = 0.05;
    double time = 0;
    System.out.println("ENTER THE TIME PERIOD");
    time = ss.nextDouble();
    double amount;
    amount = balance * Math.pow((1 + interest_rate), time);
    balance = amount;
    }

    void withdraw(int val) {
    if (val > balance) {
        System.out.println("out of funds, withdraw lesser
amount");
    } else {
        balance -= val;
        System.out.println("withdrawal successful");
        System.out.println("new balance: " + balance);
    }
```

```java
    }

    void check_min() {
    double min_bal = 2000.00;
    double penalty = 100.00;
    if (balance < min_bal) {
        System.out.println("BALANCE LESSER THAN MINIMUM BALANCE, PENALTY IMPOSED");
        balance -= penalty;
    } else {
        System.out.println("BALANCE HIGHER THAN MINIMUM BALANCE, NO PENALTY");
    }
    }
}

class cur_acc extends account {
    double balance;

    cur_acc(String N, int An, String At, Double B) {
    Name = N;
    Acc_num = An;
    Acc_type = At;
    balance = B;
    }

    void deposit(int val) {
```

```java
    balance += val;
    }

    void display_bal() {
    System.out.println("YOUR BALANCE IS: " + balance);
    }

    void deposit_interest() {
    System.out.println("NO DEPOSIT PROVIDED FOR
CURRENT ACCOUNT");
    }

    void withdraw() {
    System.out.println("NO WITHDRAWAL PROVIDED
FOR CURRENT ACCOUNT");
    }

    void Cheque_withdrawal(int val) {
    balance -= val;
    System.out.println("withdrawal successful");
    System.out.println("new balance: " + balance);
    }

    void check_min() {
    double min_bal = 2000.00;
    double penalty = 100.00;
    if (balance < min_bal) {
```

```java
            System.out.println("BALANCE LESSER THAN
MINIMUM BALANCE, PENALTY IMPOSED");
        balance -= penalty;
    } else {
        System.out.println("BALANCE HIGHER THAN
MINIMUM BALANCE, NO PENALTY");
    }
    }
}

class Bank {
    public static void main(String args[]) {
    Scanner ss = new Scanner(System.in);
    System.out.println("Enter your name, account number,
aacount type(savings/current), balance");
    String Name = ss.nextLine();
    int Acc_num = ss.nextInt();
    String Acc_type = ss.next();
    double balance = ss.nextDouble();
    if (Acc_type.equals("savings")) {
        sav_acc a1 = new sav_acc(Name, Acc_num,
Acc_type, balance);
        int choice = 0;
        while (choice != 6) {
        System.out.println(
```

```java
                "1.Deposit\n2.Display Balance\n3.Compute and
deposit interest\n4.withdraw\n5.Check for minimum
balance\n6.Exit");
        choice = ss.nextInt();
        switch (choice) {
                case (1):
                System.out.println("Enter the value to deposit");
                int val = ss.nextInt();
                a1.deposit(val);
                break;
                case (2):
                a1.display_bal();
                break;
                case (3):
                a1.deposit_interest();
                break;
                case (4):
                System.out.println("Enter the value to
withdraw");
                int withd = ss.nextInt();
                a1.withdraw(withd);
                break;
                case (5):
                a1.check_min();
                break;
                case (6):
                System.out.println("Exited");
```

```java
                    break;
                    default:
                    System.out.println("Enter a valid choice");
                    break;
            }
        }
    } else {
        cur_acc a1 = new cur_acc(Name, Acc_num,
Acc_type, balance);
        int choice = 0;
        while (choice != 7) {
        System.out.println(
            "1.Deposit\n2.Display balance\n3.Compute and
deposit interest\n4.Withdraw\n5.Cheque Withdrawal\n6.Check
for minimum balance\n7.Exit");
        choice = ss.nextInt();
        switch (choice) {
            case (1):
            System.out.println("Enter the value to deposit");
            int val = ss.nextInt();
            a1.deposit(val);
            break;
            case (2):
            a1.display_bal();
            break;
            case (3):
            a1.deposit_interest();
```

```java
                break;
            case (4):
                a1.withdraw();
                break;
            case(5):
                System.out.println("Enter the value to
withdraw");
                int val1 = ss.nextInt();
                a1.Cheque_withdrawal(val1);
            case (6):
                a1.check_min();
                break;
            case (7):
                System.out.println("Exited");
                break;
            default:
                System.out.println("Enter a valid choice");
                break;
            }
        }
    }
    }
}
```

OUTPUT:

SAVINGS ACCOUNT

```
Command Prompt

C:\Users\Admin\Documents\1BM21CS248>javac BAnk.java

C:\Users\Admin\Documents\1BM21CS248>java Bank
Enter your name, account number, aacount type(savings/current), balance
ZORO
123450000
savings
2000
1.Deposit
2.Display Balance
3.Compute and deposit interest
4.withdraw
5.Check for minimum balance
6.Exit
1
Enter the value to deposit
500
1.Deposit
2.Display Balance
3.Compute and deposit interest
4.withdraw
5.Check for minimum balance
6.Exit
2
YOUR BALANCE IS: 2500.0
1.Deposit
2.Display Balance
3.Compute and deposit interest
4.withdraw
5.Check for minimum balance
6.Exit
3
ENTER THE TIME PERIOD
2
1.Deposit
2.Display Balance
3.Compute and deposit interest
4.withdraw
5.Check for minimum balance
6.Exit
2
YOUR BALANCE IS: 2756.25
1.Deposit
2.Display Balance
3.Compute and deposit interest
4.withdraw
5.Check for minimum balance
6.Exit
4
Enter the value to withdraw
3000
out of funds, withdraw lesser amount
1.Deposit
2.Display Balance
3.Compute and deposit interest
4.withdraw
5.Check for minimum balance
6.Exit
4
Enter the value to withdraw
500
withdrawal successful
```

```
Command Prompt

Enter the value to withdraw
500
withdrawal successful
new balance: 2256.25
1.Deposit
2.Display Balance
3.Compute and deposit interest
4.withdraw
5.Check for minimum balance
6.Exit
5
BALANCE HIGHER THAN MINIMUM BALANCE, NO PENALTY
1.Deposit
2.Display Balance
3.Compute and deposit interest
4.withdraw
5.Check for minimum balance
6.Exit
4
Enter the value to withdraw
500
withdrawal successful
new balance: 1756.25
1.Deposit
2.Display Balance
3.Compute and deposit interest
4.withdraw
5.Check for minimum balance
6.Exit
5
BALANCE LESSER THAN MINIMUM BALANCE, PENALTY IMPOSED
1.Deposit
2.Display Balance
3.Compute and deposit interest
4.withdraw
5.Check for minimum balance
6.Exit
2
YOUR BALANCE IS: 1656.25
1.Deposit
2.Display Balance
3.Compute and deposit interest
4.withdraw
5.Check for minimum balance
6.Exit
6
Exited
```

CURRENT ACCOUNT

```
Command Prompt

C:\Users\Admin\Desktop>cd C:\Users\Admin\Documents\1BM21CS248

C:\Users\Admin\Documents\1BM21CS248>javac Bank.java

C:\Users\Admin\Documents\1BM21CS248>java Bank
Enter your name, account number, aacount type(savings/current), balance
ITACHI
1230050000
current
2000
1.Deposit
2.Display balance
3.Compute and deposit interest
4.Withdraw
5.Cheque Withdrawal
6.Check for minimum balance
7.Exit
1
Enter the value to deposit
500
1.Deposit
2.Display balance
3.Compute and deposit interest
4.Withdraw
5.Cheque Withdrawal
6.Check for minimum balance
7.Exit
2
YOUR BALANCE IS: 2500.0
1.Deposit
2.Display balance
3.Compute and deposit interest
4.Withdraw
5.Cheque Withdrawal
6.Check for minimum balance
7.Exit
3
NO DEPOSIT PROVIDED FOR CURRENT ACCOUNT
1.Deposit
2.Display balance
3.Compute and deposit interest
4.Withdraw
5.Cheque Withdrawal
6.Check for minimum balance
7.Exit
4
NO WITHDRAWAL PROVIDED FOR CURRENT ACCOUNT
1.Deposit
2.Display balance
3.Compute and deposit interest
4.Withdraw
5.Cheque Withdrawal
6.Check for minimum balance
7.Exit
4
```

```
Command Prompt
7.Exit
5
Enter the value to withdraw
3000
withdrawal successful
new balance: -500.0
BALANCE LESSER THAN MINIMUM BALANCE, PENALTY IMPOSED
1.Deposit
2.Display balance
3.Compute and deposit interest
4.Withdraw
5.Cheque Withdrawal
6.Check for minimum balance
7.Exit
1
Enter the value to deposit
3000
1.Deposit
2.Display balance
3.Compute and deposit interest
4.Withdraw
5.Cheque Withdrawal
6.Check for minimum balance
7.Exit
2
YOUR BALANCE IS: 2400.0
1.Deposit
2.Display balance
3.Compute and deposit interest
4.Withdraw
5.Cheque Withdrawal
6.Check for minimum balance
7.Exit
6
BALANCE HIGHER THAN MINIMUM BALANCE, NO PENALTY
1.Deposit
2.Display balance
3.Compute and deposit interest
4.Withdraw
5.Cheque Withdrawal
6.Check for minimum balance
7.Exit
7
Exited
```

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