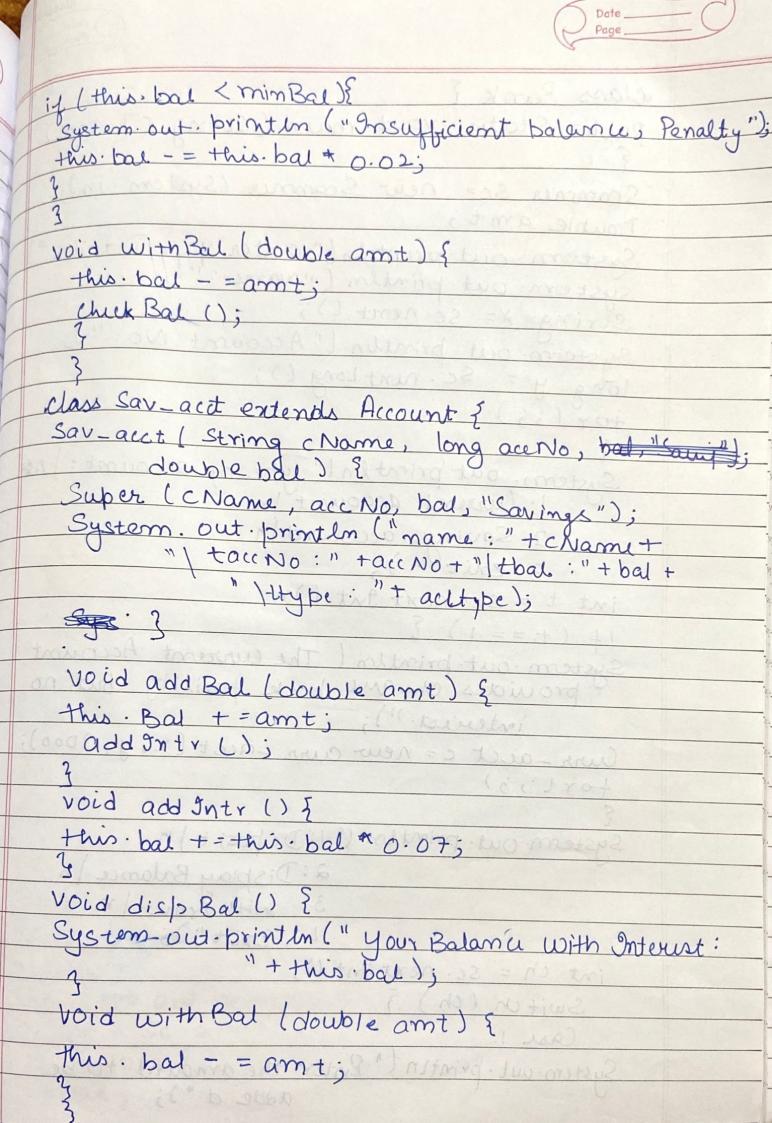WEEK 8

PROGRAM 2

```java
import java.util.Scanner;
abstract class Account {
   string cName, accType;
    long accNo;
    double bal;
    final double minBal = 1000.0;
Account (String cName, long accNo,
            double bal, String accType)
  {
    this.accNo = accNo;
    this.cName = cName;
    this.bal = bal;
    this.accType = accType;
  }
  abstract void addBal (double amt);
  abstract void dispBal ();
  abstract void withBal (double amt);
}

class Curr_acct extends Account {
Curr_acct (String cName, long accNo, double bal){
super(cName, accNo, bal, "Current");
System.out.println(" Name :"+ cName +"| accNo: "
        + accNo + "|bal : " + bal +"| type:
        " + accType);
}

void addBal (double amt){
 this.bal += amt;
}

void dispBal () {
 System.out.println(" your Balance is: "+this.B

void checkBal () {
```

```java
if (this.bal < minBal){
System.out.println("Insufficient balance, Penalty");
this.bal -= this.bal * 0.02;
}
}

void withBal (double amt) {
    this.bal -= amt;
    checkBal ();
}
}

class Sav_acct extends Account {
Sav_acct ( String cName, long accNo, bal, "Saving");
            double bal ) {
    Super (cName, accNo, bal, "Savings");
    System.out.println ("name :" + cName +
        "|taccNo :" + accNo + "|tbal :" + bal +
        " |ttype :" + acctype);
}

void addBal (double amt) {
this.Bal += amt;
addIntr ();
}
void addIntr () {
this.bal += this.bal * 0.07;
}
void dispBal () {
System.out.println (" your Balance with Interest:
        " + this.bal);
}
void withBal (double amt) {
this.bal -= amt;
}
}
```
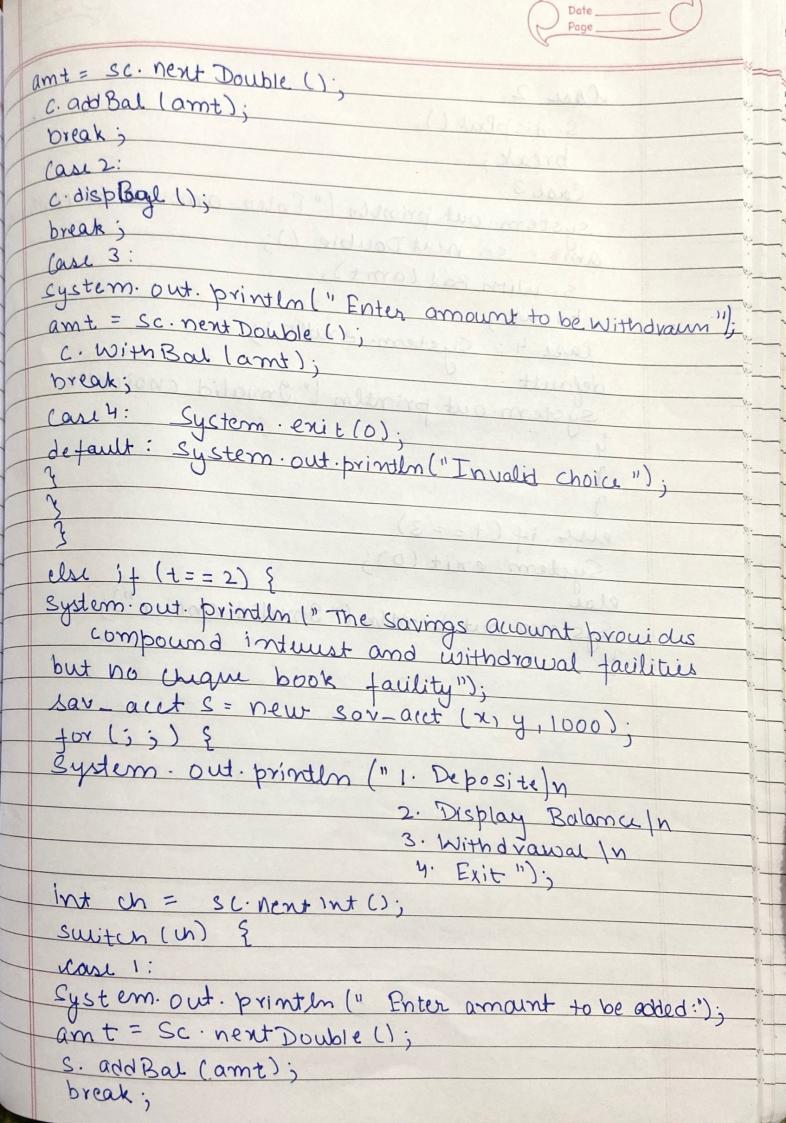
```
class Bank {
public static void main (String [] args)
{
Scanner sc= new Scanner (System.in);
Double amt;
System.out.println(" enter your Details:");
System.out.println ("Name :");
String x= sc.next ();
System.out.println ("Account No:");
long y = sc.nextLong ();
for (;;)
{
System.out.println ("Type of account : \n
      1. current account \n
      2. Savings account \n
      3. exit" );
int t = sc.nextInt ();
if (t == 1) {
System.out.println ( The current Account
      provides cheque book facility but no
      interest.");
Curr -acct c = new curr -acct (x, y, 1000);
for (;;)
{
System.out.println ("1: Deposit \n
                     2: Display Balance \n
                     3: Withdraw \n
                     4: Exit");
int ch = sc.nextInt ();
Switch (ch) {
Case 1:
System.out.println (" Enter the amount to be
                     added:");
```

```
            amt = sc. nextDouble();
            c. addBal (amt);
            break;
        Case 2:
            c. dispBal ();
            break;
        Case 3:
            system. out. println(" Enter amount to be withdrawn");
            amt = sc. nextDouble();
            c. withBal (amt);
            break;
        Case 4:    System. exit(0);
        default :  System. out.println("Invalid choice ");
        }
    }
}

else if (t == 2) {
System. out. println(" The savings account provides
    compound interest and withdrawal facilities
    but no cheque book facility");
sav_acct s = new sav_acct (x, y, 1000);
for (; ;) {
System. out. println ("1. Deposite\n
                        2. Display Balance\n
                        3. Withdrawal \n
                        4.  Exit ");
int ch =    sc. next int ();
switch (ch) {
case 1:
System. out. println (" Enter amount to be added:");
amt = sc. next Double();
s. addBal (amt);
break;
```

```
Case 2:
    S. dispBal ();
    break;
Case 3:
    System.out.println ("Enter amount to withdraw
    amt = sc. nextDouble ();
    S. withBal (amt);
    break;
Case 4:  System.exit(0);
default :
    System.out.println (" Invalid choice");
}
}
}

else if (t==3)
    System.exit (0);
else
    System.out.println (" Invalid choice");
}
```