

QUESTION AND CODE

5) Bank Management

Code:

```
import java.util.Scanner;  
import java.lang.*;
```

Class Account

```
{  
    String name, type;  
    int accno;  
    double balance;  
    void set();  
}
```

```
Scanner s = new Scanner(System.in);
```

```
System.out.println("Enter Customer name:");  
name = s.next();
```

```
System.out.println("Enter type of account:");
```

```
type = s.next();
```

```
System.out.println("Enter account number:");
```

```
accno = s.nextInt();
```

```
System.out.println("Enter book balance:");
```

```
balance = s.nextDouble();
```

```
}
```

void display()

```
{  
    System.out.println("Customer name is: " + name);
```

```
System.out.println("Customer account type is: " + type);
```

```
System.out.println("Customer account number is: " + accno);
```

```
System.out.println("Enter account number:");
```

```
}
```

```
void display()
```

```
{  
    S.o.f("Enter account number:");
```

```
Scanner s = new Scanner(System.in);
```

```
double balance;
```

```
balance = s.nextDouble();
```

```
}
```

```
}
```

```
class Sav-a
```

```
{  
    double i;
```

```
void display()
```

```
{  
    int
```

```
int
```

```
int
```

```
int
```

```
S.o.
```

```
S.o.
```

```
S.o.
```

```
S.o.
```

```
int
```

```
int
```

```
int
```

```
int
```

```
int
```

```
int
```

```
int
```

```

System.out.println("Bank balance is: " + balance);
}
void deposit()

```

```

{
    Scanner s = new Scanner(System.in);
    double amt = s.nextDouble();
    balance += amt;
}
}

```

```

class Savings extends Account

```

```

{
    double interest;
    void compInt()
    {
        int time_in_yrs;
        float int_rate_in_pct;
        int n; Scanner s = new Scanner(System.in);
        s.o.p("Enter time in yrs"); time_in_yrs = s.nextInt();
        s.o.p("Enter interest rate"); int_rate_in_pct = s.nextFloat();
        s.o.p("Enter no of times interest is compounded for year"); n = s.nextInt();
        interest = balance * (Math.pow(1 + int_rate_in_pct/n, time_in_yrs));
        balance += interest;
    }
}

```

```

void withdraw()
{
    S.o.p("Enter amt to be withdrawn");
    Scanner S = new Scanner(System.in);
    double amt = S.nextDouble();
    if (balance > amt) { balance -= amt; }
    else { S.o.p("Insufficient balance"); }
}
}

```

class Cash - acc extends Amount

```

{
    void min_balance()
    {
        if (balance < 1000)
        {
            S.o.p("Below 1000 penalty");
            balance -= 100;
        }
        else { S.o.p("No penalty"); }
    }
}

```

void withdraw()

```

{
    S.o.p("Enter amt to be withdrawn");
    double amt = S.nextDouble();
    if (balance > amt) { balance -= amt; }
}

```

```

else { S.o.p("Insufficient balance"); }
}

```

class Bank

```

{
    Scanner S;
}

```

String

String

String

String

String

S.o.p("Enter amt to be withdrawn");

String

String

String

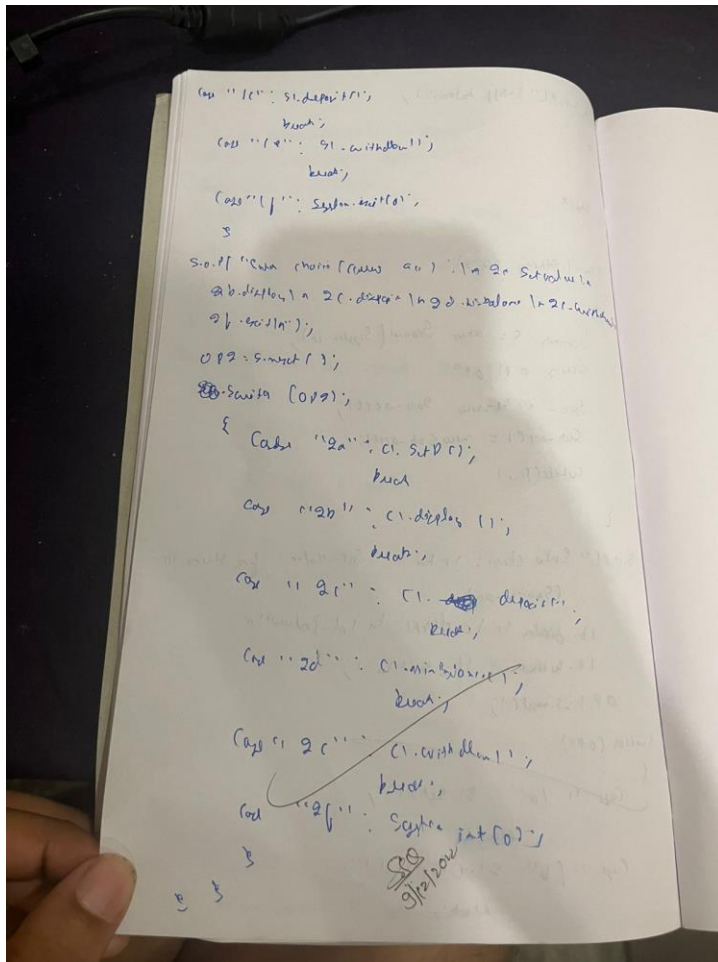
String

String

```

class { s.o.p ("I-Soft balance");
}
3
class Bank
{
    p.gun (String sGC)
    {
        Scanner s = new Scanner (System.in);
        String op, ops;
        Sav = s1 = new Sav.act (1);
        Cur.acct1 = new Cur.acct1;
        while (true)
        {
            s.o.p ("Enter Chose: 1. In to Set value for s1 in (Saving-acc)
            1b. Display In 1c. Display In 1d. Withdraw
            1e. Withdraw 1f. quit\n");
            op = s.next ();
            switch (op)
            {
                case "1a": s1.setD (1);
                    break;
                case "1b": s1.Display ();
                    break;
            }
        }
    }
}

```



OUTPUT

```

Enter the choice:
1a. Set the values for savings acc
1b. display
1c. deposit
1d. Interest
1e. Withdraw
1f. exit
1a
Enter customer name: dhruva
Enter type of account: saving
Enter account number: 34
Enter bank balance: 34000
Enter the choice:
2a. Set the values for current account
2b. display
2c. deposit
2d. transferCheck
2e. Withdraw
2f. exit
2a
Enter customer name: dhruva
Enter type of account: current
Enter account number: 333
Enter bank balance: 67000
Enter the choice:
1a. Set the values for savings acc
1b. display
1c. deposit
1d. Interest
1e. Withdraw
1f. exit
1b
Customer name is: dhruva
Customer account type is: saving
Customer account number is: 34
Current balance is: 34000.0

```

```
Enter the choice:
2a.Set the values for current account
2b. display
2c. deposit
2d. transferCheck
2e. Withdraw
2f. exit
2b
Customer name is: dhruva
Customer account type is: current
Customer account number is: 333
Current balance is: 67000.0
Enter the choice:
1a.Set the values for savings acc
1b. display
1c. deposit
1d. Interest
1e. Withdraw
1f. exit
1c
Enter the amount to be deposited: 34000
Enter the choice:
2a.Set the values for current account
2b. display
2c. deposit
2d. transferCheck
2e. Withdraw
2f. exit
2c
Enter the amount to be deposited: 30000
Enter the choice:
1a.Set the values for savings acc
1b. display
1c. deposit
1d. Interest
1e. Withdraw
1f. exit
1d
Enter time in yrs:
2
Enter rate of interest:
10
Enter the number of times interest is compounded per year:
3
```

```
Enter the choice:
2a.Set the values for current account
2b. display
2c. deposit
2d. transferCheck
2e. Withdraw
2f. exit
2b
Customer name is: dhruva
Customer account type is: current
Customer account number is: 333
Current balance is: 97000.0
Enter the choice:
1a.Set the values for savings acc
1b. display
1c. deposit
1d. Interest
1e. Withdraw
1f. exit
1b
Customer name is: dhruva
Customer account type is: saving
Customer account number is: 34
Current balance is: 4.5030512967112005E8
Enter the choice:
2a.Set the values for current account
2b. display
2c. deposit
2d. transferCheck
2e. Withdraw
2f. exit
2d
Enter the check amount: 45600
Rupees 45600.0 debited
Enter the choice:
1a.Set the values for savings acc
1b. display
1c. deposit
1d. Interest
1e. Withdraw
1f. exit
1b
Customer name is: dhruva
Customer account type is: saving
Customer account number is: 34
Current balance is: 4.5030512967112005E8
```