

LAB 5

```
import java.util.*;
import java.lang.Math;
class Account
{
    String name;
    int autno;
    char type;
    double bal;
    double dep;
    double chq;

    void get(char c)
    {
        type = c;
        if (c == 's' || c == 'S')
            chq = false;
        else chq = true;
        Scanner sc = new Scanner(System.in);
        System.out.println("Enter name, account number and available balance");
        name = sc.next();
        autno = sc.nextInt();
        bal = sc.nextDouble();
    }

    void putd()
    {
        System.out.println("Account details:");
        System.out.println("Name: " + name + "\n"
            "Account no: " + autno + "\n"
            "Account type: " + type + "\n"
            "Balance: " + bal);
    }
}
```

```
void dep()
{
    Scanner s1 = new Scanner(System.in);
    System.out.println("Enter the deposit amount");
    dep = s1.nextDouble();
    balance = balance + dep;
}

void display()
{
    System.out.println("Balance amount is " + bal);
}

void check()
{
    if (chq == false)
        System.out.println("Cheque book facility : not available");
    else System.out.println("Cheque book facility: is available");
}
}
```

```
class Saving extends Account
```

```
{
    double rate;
    double s_with;
    int n;
    int ch;
    double amt;
    double term;
    double pr;
    void ci()
    {
        Scanner s1 = new Scanner(System.in);
        System.out.println("Enter principal amt, rate and years (term)");
        pr = s1.nextDouble();
    }
}
```



```

        rate = ss.nextDouble();
        term = ss.nextDouble();
        System.out.println("Enter the number of times
        interest is compounded annually");
        n = ss.nextInt();
        amt = pr * Math.pow((1 + (rate/100)), (n * term));
        bal += amt;
        System.out.println("Interest is compounded and
        deposited");
    }
    void with_s()
    {
        Scanner ss = new Scanner(System.in);
        System.out.println("Enter amt of money to be
        withdrawn");
        dep = ss.nextDouble();
        if (s_with > bal)
            System.out.println("Insufficient funds");
        else
        {
            balance -= s_with;
        }
    }
}

```

```

class Current extends Account
{
    double c_with;
    double per;
    double min;
    Current()
    {
        per = 100;
        min = 500;
    }
    void with_c()
    {

```

```

Scanner xx = new Scanner(System.in);
System.out.println("Enter amount to be withdrawn");
double c_with = xx.nextDouble();
if (c_with > bal) {
    System.out.println("Insufficient funds");
    return;
}
else {
    bal -= c_with;
    System.out.println("Amt has been withdrawn; balance updated");
}
if (bal < min) {
    System.out.println("Balance below minimum threshold. Penalty charge = 100/-");
    if (bal < pen) {
        System.out.println("Due to insufficient funds, penalty will be deducted from account after replenishing. Current balance = " + bal);
    }
    else {
        bal -= pen;
        System.out.println("Penalty deducted. Balance = " + bal);
    }
}
}
}
}

```

class Lab5

```

{
    public static void main (String sss[])
    {
        int chh, cch;
        Scanner sx = new Scanner(System.in);
        System.out.println("aving out - 1; Currnt - 2");
        int ch = sx.nextInt();
        if (ch == 1)
        {

```



```

saving s = new saving();
s.get('s');
do {
    System.out.println("1. Deposit money In 2. Compound Interest In
3. Withdrawal In 4. Balance display In 5. Cheque book In 6. Exit");
    System.out.println("Enter your choice");
    chh = sx.nextInt();
    switch (chh)
    {
        case 1: s.depl();
            break;
        case 2: s.ci();
            break;
        case 3: s.display();
            break;
        case 4: s.check();
            break;
        case 6: break;
        default: then System.out.println("Wrong choice!");
            break;
    }
} while (chh != 6);
}
else if (chh == 2)
{
    Current cr = new Current cr();
    cr.get('c');
    do {
        System.out.println("1. Deposit Money In 2. Cheque book
In 3. Withdrawal In 4. Balance display In 5. Exit");
        cch = sx.nextInt();
        switch (cch)
        {
            case 1: cr.depl();
                break;

```

```
case 2: u.check();  
        break;  
case 3: u.with - (L);  
        break;  
case 4: u.display();  
        break;  
case 5: break;  
default: System.out.println("Wrong!");  
        break;  
}  
} while (cch != 5);  
}  
else System.out.println("Wrong!");  
}  
}
```