

```

import java.util.Scanner;
abstract class Account{
    String custname;
    int accnum,acc_type;
    float balance=0;

    Account(String a,int b,int c)
    {
        custname = a;
        accnum = b;
        acc_type = c;
    }
    abstract void deposit(float d);
    abstract void withdraw(float w);
    abstract void display();
}

class Curr_acct extends Account{
    static float minBalance=1000;
    static float penalty=100;
    Curr_acct(String a,int b,int c)
    {
        super(a,b,c);
    }
    void checkMinBal()
    {
        if(balance<minBalance)
        {
            System.out.println("Penalty will be deducted since balance is
below minimum amount");
            balance-=penalty;
        }
    }
    void deposit(float d)
    {
        balance+=d;
        System.out.println("Amount added successfully");
        System.out.println("New Balance : "+balance);
    }
    void withdraw(float w)
    {
        if(balance<w)
        {
            System.out.println("Insufficient funds");
            return;
        }
        balance-=w;
        System.out.println("Amount withdrawn successfully");
        System.out.println("New balance : "+balance);
    }
    void display()
    {
        checkMinBal();
        System.out.println("Name : "+custname+"\nAccount Number :
"+accnum+"\nAccount Type : Current\nBalance : "+balance);
    }
}

class Sav_acct extends Account{
    static float interest=5;
    Sav_acct(String a,int b,int c)
    {

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        super(a,b,c);
    }
    void interest()
    {
        System.out.println("5% Interest has been credited to the account");
        balance+=balance*(interest/100.0);
    }
    void deposit(float d)
    {
        balance+=d;
        System.out.println("Amount added successfully");
        System.out.println("New balance : "+balance);
    }
    void withdraw(float w)
    {
        if(balance<w)
        {
            System.out.println("Insufficient funds");
            return;
        }
        balance-=w;
        System.out.println("Amount withdrawn successfully");
        System.out.println("New balance : "+balance);
    }
    void display()
    {
        interest();
        System.out.println("\nName : "+custname+"\nAccount Number : "+accnum+"\nAccount Type : Current\nBalance : "+balance);
    }
}

public class Bankmain {
    public static void main(String args[])
    {
        Scanner scr = new Scanner(System.in);
        Account a3;
        System.out.println("Enter Name:\n");
        String s = scr.next();
        System.out.println("Enter account number");
        int a=scr.nextInt();
        System.out.println("Enter Account type\n1.Savings\n2.Current");
        int b = scr.nextInt();
        if(b==1)
        {
            Sav_acct a1 = new Sav_acct(s,a,b);
            a3=a1;
        }
        else
        {
            Curr_acct a2 = new Curr_acct(s,a,b);
            a3=a2;
        }
        for(;;)
        {
            System.out.println("\n1.Withdraw\n2.Deposit\n3.Account Details\n4.Exit");
            int ch = scr.nextInt();
            switch(ch)
            {
                case 1:
                    System.out.println("Enter amount");
                    float w = scr.nextFloat();

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        a3.withdraw(w);
        break;
    case 2:
        System.out.println("Enter amount");
        float d = scr.nextFloat();
        a3.deposit(d);
        break;
    case 3:
        a3.display();
        break;
    case 4:
        return;
    }
}
}
}

```

Output:

1.

```

Enter Name:
Naman
Enter account number
123
Enter Account type
1.Savings
2.Current
1

1.Withdraw
2.Deposit
3.Account Details
4.Exit
1
Enter amount
50
Insufficient funds

1.Withdraw
2.Deposit
3.Account Details
4.Exit
2
Enter amount
1000
Amount added successfully
New balance : 1000.0

```

2.

```
1.Withdraw
2.Deposit
3.Account Details
4.Exit
1
Enter amount
50
Amount withdrawn successfully
New balance : 950.0

1.Withdraw
2.Deposit
3.Account Details
4.Exit
3
5% Interest has been credited to the account

Name : Naman
Account Number : 123
Account Type : Current
Balance : 997.5

1.Withdraw
2.Deposit
3.Account Details
4.Exit
```

3.

```
Enter Name:
Naman
Enter account number
123
Enter Account type
1.Savings
2.Current
2

1.Withdraw
2.Deposit
3.Account Details
4.Exit
2
Enter amount
900
Amount added successfully
New Balance : 900.0

1.Withdraw
2.Deposit
3.Account Details
4.Exit
1
Enter amount
400
Amount withdrawn successfully
New balance : 500.0
```

4.

```
1.Withdraw  
2.Deposit  
3.Account Details  
4.Exit
```

3

Penalty will be deducted since balance is below minimum amount

Name : Naman

Account Number : 123

Account Type : Current

Balance : 400.0