

```
import java.util.Scanner;
```

```
class account {
```

```
    private String name;  
    private long account-number;  
    private int account-type;  
    double balance;  
    void get-data()
```

```
{
```

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

```
    System.out.println("enter your name");
```

```
    name = ss.next();
```

```
    System.out.println("enter the account number");
```

```
    account number = ss.nextLong();
```

```
    System.out.println("choose the account type");
```

```
    System.out.println("1. Savings account");
```

```
    System.out.println("2. Current account");
```

```
    account-type = ss.nextInt();
```

```
}
```

```
int return-account-type()
```

```
{
```

```
    return account-type;
```

```
}
```

```
}
```

```
class savings extends account
```

```
{
```

```
    double principle-amount;
```

```
    double compound-interest;
```

```
    int years;
```

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

```
    double amount;
```

```
void get-sav-balance()
```

```
{
```

```
    System.out.println("enter the amount to be placed in your savings acc");
```

```
    amount = ss.nextDouble();
```

```
    balance += amount;
```

```
}
```

```
void display-sav-balance()
```

```
{
```

```
    System.out.println("balance = " + balance);
```

```
}
```

```
void compute_sav_interest()
```

```
{
```

```
System.out.println("enter the principle amount");
```

```
principle_amount = ss.nextDouble();
```

```
System.out.println("rate of interest per annum shall be 5%");
```

```
System.out.println("enter the years at which the interest should be calculated");
```

```
years = ss.nextInt();
```

```
compound_interest = principle_amount * (Math.pow(1 + 0.05, years));
```

```
System.out.println("compound interest = " + compound_interest);
```

```
}
```

```
void withdraw_sav()
```

```
{
```

```
System.out.println("enter the amount to be withdrawn");
```

```
amount = ss.nextDouble();
```

```
balance = balance - amount;
```

```
}
```

```
}
```

```
class current_extends_account
```

```
{
```

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

```
double amount;
```

```
final double min_balance = 5000;
```

```
void get_cur_balance()
```

```
{
```

```
System.out.println("enter the amount to be deposited");
```

```
amount = ss.nextDouble();
```

```
balance += amount;
```

```
}
```

```
void display_cur_balance()
```

```
{
```

```
System.out.println("balance = " + balance);
```

```
}
```

```
void compute_cur_service_charge()
```

```
{
```

```
if (balance < min_balance)
```

```
{
```

```
System.out.println("service tax of Rs 500 shall be levied");
```

```
balance = balance - 500;
```

```
}
```

else

```
{ System.out.println("minimum balance to maintain");  
}
```

```
}  
void withdraw-cur()
```

```
{ System.out.println("enter the amount to be withdrawn");  
  amount = ss.nextDouble();  
  balance = balance - amount;  
}
```

```
}
```

class bank-main

```
{ public static void main (String args [])
```

```
{  
  int type, option;  
  Scanner ss = new Scanner(System.in);  
  System.out.println("enter bank details");  
  Account acc = new account();  
  acc.get-data();  
  type = acc.return-account-type();
```

```
  if (type == 1)
```

```
{  
  System.out.println("SAVINGS ACCOUNT");
```

```
  Savings sav = new Savings();
```

```
  sav.get-sav-balance();
```

```
  sav.display-sav-balance();
```

```
  System.out.println("do you want to calculate compound interest?  
  (if yes enter 1 else 0)");
```

```
  option = ss.nextInt();
```

```
  if (option == 1)
```

```
{
```

```
    sav.compute-sav-interest();
```

```
}
```

```
  sav.withdrawal-sav();
```

```
  sav.display-sav-balance();  
}
```



i) (type == 2)

{  
system.out.println("current Account");

current cur = new current();

cur.get - cur - balance();

cur.display - cur - blnce();

cur.compute - cur - service - charges();

cur.display - cur - blnce();

cur.withdrawl - cur();

cur.display - cur - blnce();

}

}