```
import java util Arraylist;
class Bank Account i
    private static int account Number;
    private double balance;
    private String name;
    public Bank Account (String name) {
        this (name, 0);
        account Number ++;
    public Bank Account (String name, double balance)
         this name = name;
         this. balance = balance;
         account Number ++;
    public int get Account Number () { return account Number; }
    public void setAccountNumber (int accountNumber) { this accountNumber = accountMumber; }
    public double get balance () freturn balance; ?
    public void set balance (double bolance) 1 this balance = balance; ?
    public String get/lame () [return rame;}
    public void setName ( 9tring name ) 1 this name - name; 3
class Transaction ?
    private double money;
    public string get Date C) {
        Simple DateFormat S1 = new Simple DateFormat ("dd/MM/yyyy");
         Date di = new Date();
         return (st. format(d1)+"");
    public String get Money () { return money; }
    public void set Money ( string money ) ( this money = money ; )
```

```
class Checking extends Bank Account I
    private Arraylist < Transaction > transaction = new Arraylist <> ();
    public Checking (String name) { super(name); }
public Checking (String name, double balance); }
public void deposit (double amount) {
          set balance (getDalance()+amount);
          if (transactions, size () < 100) (
              Transaction to = new Transaction ();
             to. set Money ("+"+ amount);
              transactions, add (+1);
         Jelse 1
              System.out.println ("Your transaction is full. Please change");
     public void withdraw (double amount) (
         set balance (get balance () - amount);
         if (transations, size () & 100 ) (
              Transaction to = new Transaction ();
              to set Money ("-"+amount);
              transactions, add (ty);
         Jelse f
              System.out.printly ( Your transaction is full. Please change");
    public void get All Transaction () i
         to (int i=0; 12 transactions. size (); 1+4) [
              System, out, printly ((i+1) +" "+ transactions, get(i). get Date() +" "+ transactions, get(i).getMoney());
```

```
class Saving extends Bomk Account 1
    private double future Value;
    private double interest Rate;
    private double deposit Money;
    private double numOf Receive 1;
    private double Time PeriodYr;
    private Arraylist < Transaction > transaction = new Arraylist <> ();
    public Saving (String name) { super(name), }
    public Saving (String name, double talance); I superchame, balance); ]
            double get Interest Pate () 5 return interest horte; 7
    public void set Interest Auter (double interest Rate) ( this Interest Rate = interest Rate; ?
           double get DepositMoney () \ return depositMoney; }
    public void set Deposit Money (double deposit Money) it ho deposit Money deposit Money;
            double get Number Of Receive Per Yr () ( retur number Of Receive Per Yr;
    public void setNumber Of Receive Per Yr (double number Of Receive Per Yr)
         this number of heceive tr - number of heceive tr;
    public double getTime Period Yr () i return time Period Yr; }
                                                                            = time Period Yr ; }
    public void settime Period Yr ( double time Period Yr ) I this time Period Yr
    public void deposit (double amount) [
         set balance (getbalance () + amount);
          if (transactions, size() ≤ 100)(
             Transaction 1 = new Transaction ();
             ty set Money ("+"+ amount);
             transactions add (+1);
         Jelse 1
             System.out.println ("Your transaction is full. Please change");
         }
```

```
public void withdraw (double amount) (
    if (getbalance()-amount) 70) (
         set balance (get balance () - amount);
         if (transations, size () & 100 ) (
              Transaction to = new Transaction();
              to set Money ( "- " + amount);
              transactions. add (+1);
         Jelse f
              System.out.println ( Your transaction is full. Please change");
    7 else 5
         System.out.prinlln("Your money not enough to withdraw");
public void get All Transaction () i
    for (int i=0; 12 transactions. size (); 1+4) [
         System, out, printly ((i+1) + " "+ transactions, get (i) get Date () + " "+ transactions, get (i) get Manay ());
public void calculate Future Value (double deposit, double interest Percent, double numar Receiveper Vi,
double fine Period Yr) i
     this deposit Money = deposit Money;
     this, interest hate = interest percent;
    this number of Roceive Per Yr = number of Receive Per Yr;
     this time Period Yr = timePeriod Yr:
     if ( numofreceive Perty == 1 ) {
         this, future lake = deposit Money * Math. pow ((1+Cthis. interest Pate/100)), this. time Period It);
         System.cut. printf( "After calculate the interest rate in 1/19 : 1/28", this time Period, this future Value);
         System out println ();
     ] else it (numofreceive Pery, == 2)
         this, future lake = deposit Money * Math. por ((1+Cthis. interest Rate/100)), this. time Period K * 2);
         System.out printf ("After calculate the interest rate in 1/18: 1/28") this time Period, this future Value);
         System out println ();
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