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Expt. No. 4

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```
import java.util.Scanner;
abstract class Shape {
  int b, h;
Shape (int b, int h){
      this.b = b;
      this.h = h;
    }
abstract void printArea();
  }

class Rectangle extends Shape{
  Rectangle(int b, int h){
        super(b,h);
      }
void printArea(){
System.out.println("area of the rectangle is:"
                          + (b*h));
  }}
class Triangle extends Shape{
   Triangle(int b, int h){
        super(b,h);
      }
Void printArea(){
System.out.println("area of the triangle is:"
                          + ((b*h)/2));
  }}
Class Circle extends Shape{
    Circle(int r){
```

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```
        super(x,0);
    }
    void printArea(){
    System.out.println("area of the circle is:"+
                                    (3.14*b*b));
    }
}
class Shapemain{
 public static void main(String args[]){
   Rectangle R = new Rectangle(10,20);
     R.printArea();
  Triangle T = new Triangle(10,20);
     T.printArea();
  Circle C = new Circle(10);
     C.printArea();
 }
}
```

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Expt. No. 5 .....

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```
import java.util.Scanner;
class Account{
    String name;
    long acc_no;
    int acc_type;
    double balance;
    Scanner SC = new Scanner(System.in);
Void getData(){
System.out.println("Enter Name:");
    name = SC.nextInt();
System.out.println("Enter account number:");
    acc_no = sc.nextlong();
System.out.println("Enter account type:
                    1n1.savings 1n2.current");
    acc_type = sc.nextInt();
}
int retacc(){
    return acc_type();
    }
};

class Savings extends Account{
    Scanner SC = new Scanner(System.in);
    double amount;
void get savacc_bal(){
    System.out.println("Enter the amount to be
placed in your saving account:");
    amount = sc.nextDouble();
    balance += amount;
}
```

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```
Void display_savacc_bal(){
  System.out.println("balance:"+balance);
}
Void cal_savacc_interest(){
System.out.println("Enter the rate of interest
                    in %:");
float rate = sc.nextFloat();
System.out.println("Enter the time in years:");
float time = sc.nextFloat();
float CI = (float)(balance*(Math.pow((1+rate/100),
                    time)));
System.out.println("the CI is:"+(CI-balance);
  balance = CI;
System.out.println("balance:"+balance);
}
class Current extends Account{
Scanner sc = new Scanner(System.in);

Void withdrawl_savacc(){
  System.out.println("Enter the amount to
                    be withdrawn:");
  float amount1 = sc.nextFloat();
balance = balance - amount1;
  System.out.println("balance:" + balance);
}}
class Current extends Account{
  Scanner sc = new Scanner(System.in);
```

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```
    double amount;
final double min_bal = 1000;
void get_curacc_bal(){
 System.out.println("Enter the amount to
    be placed in your current account:");
amount = sc.nextDouble();
    balance+= amount;
}
void display_curacc_bal(){
    System.out.println("balance:"+balance);
}
void cal_curacc_bal(){
 System.out.println()
void cal_curacc_service(){
    if(balance<min_bal){
System.out.println("Service charge of 250 will
 be imposed as penalty for having balance
 below minimum balance:");
 balance = balance -250;
System.out.println("balance:"+balance);
} else
    System.out.println("Minimum balance is
                        maintained");
    }
}
void withdraw_curacct(){
System.out.println("Enter the amount to be
        withdrawn:");
float amount1 = sc.nextFloat();
```

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```
balance = balance - amount1;
System.out.println("balance:" + balance);
}
}
class BankMain{
public static void main(String args[]){
int check, check2;
Scanner ss = new Scanner(System.in);
Account A1 = new Account();
while(true){
    A1.getData();
check = A1.retacc();
if (check == 1){
System.out.println("Saving Account");
Savings S1 = new Savings();
    S1.get_savacc_bal();
    S1.display_savacc_bal();
    S1.cal_savacc_interest();
    S1.withdrawl_savacc();

System.out.println("Press 1 to continue or 2 to
                    Exit");
check2 = ss.nextInt();
switch(check2){
    case 1: break;
    case 2: system.exit(0);
    default: break;
}
}
```

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```
else if (check==2){
System.out.println("Current Account");
System.out.println("cheque book facility
                    available");
current C1 = new current();
C1.get curacc_bal();
C1.display curacc_bal();
C1.cal_curacc_service();
C1.withdrawal_curacc();
C1.cal_curacc_service();
System.out.println("Press 1 to continue or 2
                    to exit");
check 2 = ss.nextInt();
switch (check 2){
  case 1: break;
  case 2: System.exit(0);
  default: break;
}
}
}
}
```

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