Lab4.java

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1BM19CS200

```
import java.util.*;
import java.lang.Math;
class Account
{
  String name;
  int acctno;
  char type
  double balence;
  double dep;
  booleam cheq;

void getC(char c)
{
   type = c;
   if(c=='s'||c=='S')
    cheq = false;
    else cheq = true;
   Scanner sc = new Scanner(System.in);
   System.out.println("Enter your name");
   name = sc.nextLine();
   System.out.println(" Enter the account number");
    acctno = sc.nextInt();
    System.out.println(" Enter the current available balence
                        in your account");
   balance = sc.nextDouble();
   }
```

```
void putd()
{
    system.out.println("Acount detail");
    System.out.println("Name" + name);
    System.out.println("Account type:" +type);
    System.out.println("balance:" + balnce);
}

void dep()
{
    scanner ss = newscanner(system.in);
    system.out.println("Enter the amounttobe
                        deposited");
    dep = ss.nextDouble();
    balence = balence + dep;
    System.out.println("Amount has been
                        deppes deposited and balence
                        has been updated");
}
void display()
{
    system.out.println("Balence amount" + balence);
}

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

```
}

class Savi
{
    doubl
    double
    int
    int
    doubl
    doubl

    void ci
    {
        scan
        syst
        syst
    }
}
```

```
}

class Saving extends Account
{
    double rate;
    double s with;
    int n;
    int ch;
    double amt;
    double pn;

void ci().
{
    Scanner ss = new Scanning (System.in);
    System.out.println ("Enter principal deposit account");
        pn = ss.nextDouble();
    System.out.println ("Enter the rate of interest");
        rate = SS.next Double();
    System.out.println ("Enter the term(year)");
        term = ss.nextDouble();
    System.out.println ("Enter the number of times
                        interest in compunded annually");

        n= ss.nextint();
    amt = pn * Math.pow((1+(rate/100)), (n*term));
        balence += amt;
    system.out.println ("Interest is compounded and
                and deposited ; balence is updated";

}
```

```
void with_s()
{
    Scanner ss = new Scanner(System.in);
    System.out.println("Enter the amount of money to be
                        withdrawn");
    s_with = ss.nextDouble();
    if (s_with > balance)
      System.out.println("Insufficient balence");
      else
    {balence = balence - s_with;
    System.out.printf("Money has been withdrawn
                        and balence has updated");
      }
    }
  }
class Current extends Account
  {
    double c_with;
    double min;
    Current()
    {
      pen = 100;
      min = 500;
      }

  void with_c()
  {
    Scanner xx = new scanner(System.in);
    System.out.println("Insufficient fund!");
      return;}
      else
```

```
{ balance = balance-c_with;
  System.out.println("\nSufficient fund!"
   return; }
  else
  { balence = balence - c_with;
  system.out.println(" Amount has been withdrawn
                      and balence has been updates"); }

if (balence <min)
  {
   system.out.println(" Balence is below the minimum
                       threshold. Service penalty charge
                       - 100/-");

        if (balence < pen)
  System.out.println(" Due to insufficient funds, penalty
   charge will be deducted from the account
   after replenishing. Current balence" + balence);
     else
    {
      balence = balence - pen;
System.out.println(" Penalty charge has been deducted
  from account balence. Current balence is" + balence);
                    }
                  }
    }
}
```

```
class lab4
{
  public static void main (String sss[])
  {
    int cch, chh;
    Scanner sx = new Scanner (System.in);
    System.out.println (" Welcome");
    system.out.println ("Savings account or current
                         account ? 1- Savings; 2- Current");
    int ch = sx.nextInt();
    if (ch==1)
    {
      Savings s = new Saving();
      s.get ('s');
      do {
      system.out.println (" 1. Deposit money \n
      2. Calculate compound interest
      \n 3. Withdraw money \n 4. Display blalence
      \n 5. Cheque book facility \n 6. Exit");

      system.out.println (" Enter your choice ");
      chh= sx.nextint();
      switch (chh)
      {
        case 1:
        s.dep();
        break;
```

```
case 2:
s. ci();
break;

case 3:
s. with_sl();
break;

case 4:
s.display();
break;

case 5;
s.check();
break;

case 6;
break ;

default:

system.out.println ("Whong option");
  break;
 }

} while (ch1 = 6);

}
else if(ch== 2)
```

```
{
current cr = new current();
cr.get('c');
do
{
system.out.println(" 1. Deposit Money \n 2. Chqbk book facility \n 3. Withdraw money \n 4. Display balence \n 5. Exit ");
cch = sx.nextInt();
switch(cch)
{
case 1:
cr.dep();
break;

case 2:
cr.check();
break;

case 3:
cr.with_c();
break;

case 4:
cr.display();
break;

case 5:
break;
```

```
        default:
        system.out.println("Wrong option");
         break;
        }
      } while(cch! = 5);
        }
        else  system.out.println("Wrong!");
         }
      }
   }
```