PRIYANSHU GUPTA
1BM19CS124

LAB-5

```
import java.util.Scanner;
class account
{
private String name;
private long account_number;
private int account_type;
double balance;
void set_data()
{
Scanner ss = new Scanner(System.in);
System.out.println("Enter Account Holder Name");
   name = ss.next();
System.out.println("Enter the account Number");
   account_number = ss.nextLong();
System.out.println("Choose the account type:\n
          1.Saving account\n2.Current account");
   account_type = ss.nextInt();

}
void get_data(){
System.out.println("Account Holder:" +name);
System.out.println("Account Number:" +account_number);

}
int return_account_type()
{
return account_type;
   }

}
```

```
class savings extends account
{
    Scanner ss = new Scanner (System.in);
    double amount;
    void get_sav_balance()
    {
System.out.println ("Enter the Amount to be placed in your
                                    savings Account");
    amount = ss.nextDouble();
    balance += amount;
    }
    void display_sav_balance()
    {
    System.out.println ("balance = " +balance);
    }
    void compute_save_interest()
{
System.out.println ("\n **** Calculating Compound Interest ****");
System.out.println ("Enter annual interest rate: ");
float rate = ss.nextFloat();
System.out.println ("Enter time in years: ");
float time = ss.nextFloat();
System.out.println ("Enter principle: ");
float principle = ss.nextFloat();
float CI = (float)(principle*(Math.pow((1+rate/
                    (12*100)),(12*time)))-
                                principle);
```

```
System.out.println("The Compound Interest is: "+CI);
    balance = balance + CI;
System.out.println("Balance after adding Interest:"+balance);
}

void withdrawal_saw()
{
System.out.println("Enter the amount to be withdrawn");
amount = ss.nextDouble();
balance = balance - amount;
}
}
class current extend account
{
Scanner ss = new Scanner(System.in);
double amount;
final double min_balance = 500;
void get_cur_balance()
{
System.out.println("Enter the amount to be
                    placed in your current account");
amount = ss.nextDouble();
balance += amount;
}
void display_cur_blnce()
{
System.out.println("Balance = "+balance);
}
```

```
void compute_cus_service_charges()
{
if(balance < min_balance)
{
System.out.println("service charge of Rs 100 shall
                    be levied");
        balance = balance -100;
}
else
{
System.out.println("Minimum balance is Maintained
}
}
void withdraw_cus()
{
System.out.println("Enter the amount to be
                    withdrawn");
amount = ss.nextDouble();
balance = balance - amount;
}
}
class bank
{
public static void main(String args[])
{
Scanner ss = new Scanner(System.in);
int type;
```

```
System.out.println ("Enter the bank details");
    account acc = new account();
    acc.get_data();
    type = acc.return_account_type();
      if (type==1)
      {

    System.out.println ("SAVINGS ACCOUNT");
        acc.get_data();
    savings sav = new savings();
        sav.get_sav_balance();
        sav.display_sav_bbce();
System.out.println ("Do you want to calculate Interest or
                    not: In if yes press 1 else 0");
int ch = ss.nextInt();
  if (ch==1)
  {
  sav.compute_sav_Interest();
  }
  sav.display_sav_bbce();
  sav.withdraw_sav();
  sav.display_sav_bbce();

      }
      if (type==2)
        {
    System.out.println ("CURRENT ACCOUNT");
    acc.get_data();
```

```
current cur = new current();
cur.get_cur_balance();
cur.display_cur_bline();
cur.complete_cur_service_charges();
    cur.display_cur_bline();
    cur.withdraw_cur();
    cur.display_cur_bline();

    }
    }
    }
```