5) Develop a Java Program to create a class Bank that maintains two kinds of account for its customers, one called savings account and the other current account. The savings account provides compound interest and withdrawal facilities but no cheque book facility.

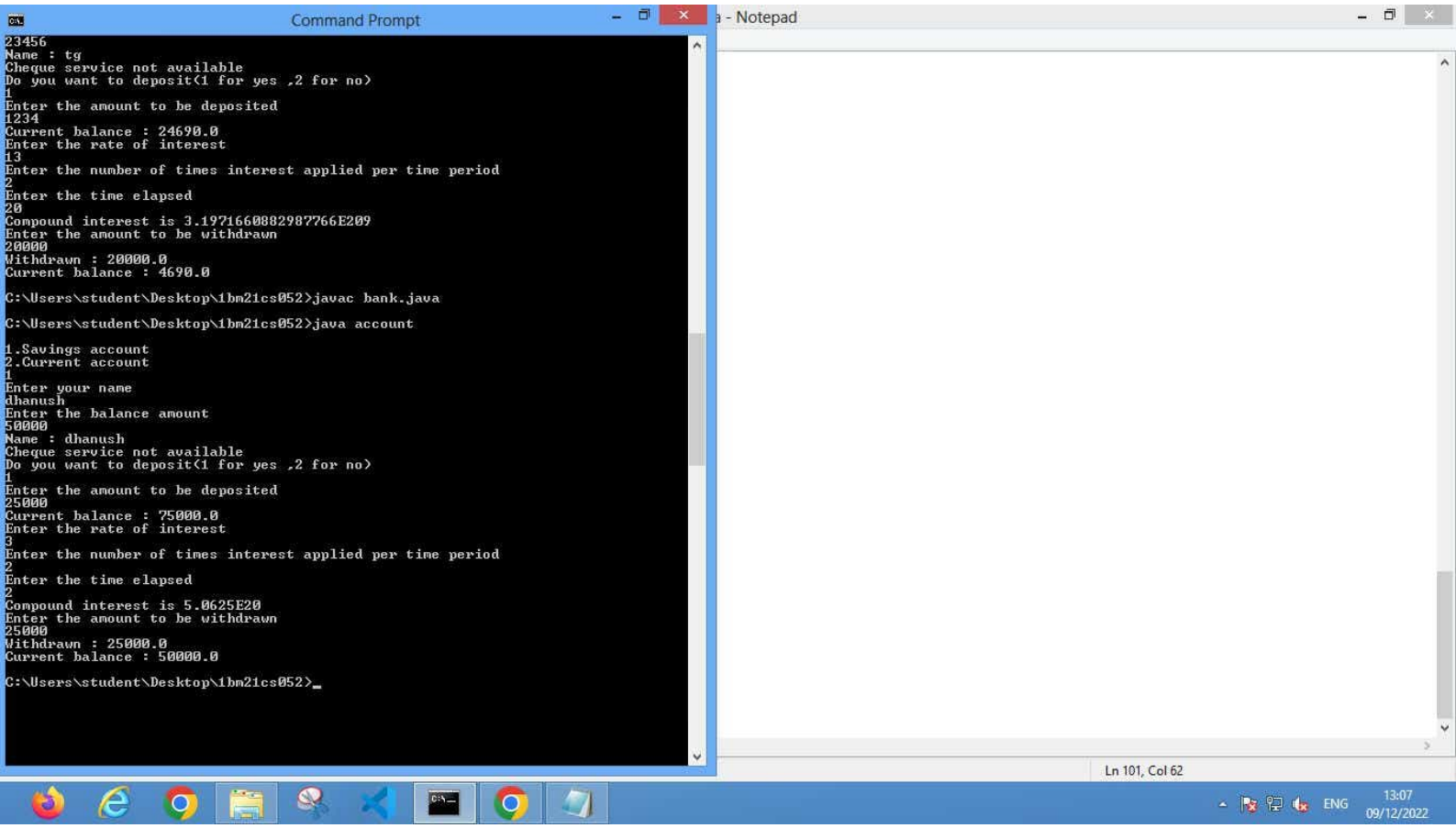
```
import java.util.*;
import java.lang.Math;
class bank {

Scanner sc = new Scanner (System.in);
String name;
int acc_no;
float bal, si;
Void accept () {
S.o.p ("Enter your name");
name = sc.nextline ();
S.o.p ("Enter the balance amount");
bal = sc.nextFloat();
}
void display () {
System.out.println ("Name :"+name);
}

Void deposit () {
float amount;
int choice;
S.o.P ("Do you want to deposit (1 for yes, 2 for no)");

Choice = sc.nextInt ();
if (choice == 1) {
System. S.o.P ("Enter the amount to be deposited");
amount = sc.nextFloat ();
if (amount > bal) {
S.o.p ("Amount in bank insufficient");
}
```

```
else {
bal = bal + amount;
}
S.o.p("current balance : " + bal);
}
}
}
```

```
Class current extends bank {
  int service_fee = 50;
    Void cheque () {
    S.o.p ("cheque service available"); {
Void withdrawal () {
  float amt;
  S.o.p ("Enter the amount to be withd
  amt = Sc.nextFloat();
  if (amt > bal)
    S.O.p ("Balance insufficient");
  else {
  bal = bal - amt;
    if (bal < 1000) {
    bal = bal - service_fee;
    S.o.p ("50rs is taken as service fee");
  }
S.o.p ("withdrawn : " + amt);
S.o.p ("current balance : " + bal);
}
}
}
```

```
class saving extends bank {
void cheque() {
 S.O.P (" Cheque service not available");
 }

Void withdrawal () {
 float amt;
  System.out.println (" Enter the amount to be
                                withdrawn");
  Amt = sc.nextfloat();
  if (amt > bal)
   system.out.println (" Balance insufficient");
 else

  bal = bal - amt;
      S.O.P (" withdrawn : " +amt);
      S.O.P (" current balance : " +bal);
     }

void interest () {
   S.O.P (" Enter the grate of interest");
   int r = sc.nextInt();
   S.O.P (" Enter the number of times interest applied
                per time period");

   int n = sc.nextInt();

   S.O.P ( Enter the time elapsed");

   int t = sc.nextInt();
      si = bal * (1+(r/n));
      S.O.P (" compound interest is " +(Math.pow(si, n*t)));
```

```
Class account {
Public static Void main (String args [ ]) {
 Scanner Sc = new Scanner (System.in);
  Saving obj 1 = new Savings();
  current obj 2 = new current();
   S.o.p ("\n1. Savings account| no. current ac
   int choice = Sc. nextInt();
   Switch (choice) {

Case 1:
      obj 1 . accept ();
      obj 2 . display ();
      obj 1. cheque1();
      obj 1 . deposit();
      obj 1 .. interest();
      obj 1 :withdrawal();
        break;

Case 2:
        obj 2. accept ();
        obj 2 . display();
        obj 2 . cheque ();
        obj 2 . deposit();
        obj 2. withdrawal();
        break;

default : S.o. p ("Invalid choice");
  }
  }
  }
```


Command Prompt
23456
Name : tg
Cheque service not available
Do you want to deposit(1 for yes ,2 for no)
1
Enter the amount to be deposited
1234
Current balance : 24690.0
Enter the rate of interest
13
Enter the number of times interest applied per time period
2
Enter the time elapsed
20
Compound interest is 3.1971660882987766E209
Enter the amount to be withdrawn
20000
Withdrawn : 20000.0
Current balance : 4690.0
C:\Users\student\Desktop\1bm21cs052>javac bank.java
C:\Users\student\Desktop\1bm21cs052>java account
1.Savings account
2.Current account
1
Enter your name
dhanush
Enter the balance amount
50000
Name : dhanush
Cheque service not available
Do you want to deposit(1 for yes ,2 for no)
1
Enter the amount to be deposited
25000
Current balance : 75000.0
Enter the rate of interest
3
Enter the number of times interest applied per time period
2
Enter the time elapsed
2
Compound interest is 5.0625E20
Enter the amount to be withdrawn
25000
Withdrawn : 25000.0
Current balance : 50000.0
C:\Users\student\Desktop\1bm21cs052>
- Notepad
Ln 101, Col 62
ENG
13:07
09/12/2022