Page No.
Date. / /

9/1/24

Q Develop a Java program to develop a class Bank with current account & savings account.

```
import java.util.Scanner;
class account
{
    String name;
    int accno;
    String type;
    double balance;
    account(String name, int accno, String type, double balance)
    {
        this.name = name;
        this.accno = accno;
        this.type = type;
        this.balance = balance;
    }
    void deposit(double amount)
    {
        balance += amount;
    }

    void withdraw(double amount)
    {   if((balance-amount)>=0)
        balance -= amount;
        else
            System.out.println("Insufficient Balance, Cannot withdraw");
    }
    void display()
    {
    System.out.println("Name: " + name + " Account No.: " + accno +
        " Type: " + type + " Balance: " + balance);
    }
}
```

Page No.
Date. / /

```
class Savacct extends account
{
  private static double rate = 5;
  Savacct(String name, int accno, double balance)
  {
    super(name, accno, "savings", balance);
  }
  void interest()
  {
    balance = balance * (rate)/100;
    System.out.println("Interest: " + balance);
  }
}

class Curracct extends account
{
  private double minbal = 500;
  private double servicecharges = 50;
  Curracct(String name, int accno, double balance)
  {
    super(name, accno, "current", balance);
  }
  void checkmin()
  {
    if(balance < minbal)
    {
      System.out.println("Balance is less than the minimum
balance, thus service charges imposed!" + servicecharges);
      balance = service charges;
      System.out.println("Balance is: " + balance);
    }
  }
}
```

```
class bank {
public static void main(String args[])
{
    Scanner sc = new Scanner(System.in);
    System.out.println("Enter name:");
    String name = sc.next();
    System.out.println("Enter account no.:");
    int accno = sc.nextInt();
    System.out.println("Enter Initial Balance:");
    double balance = sc.nextDouble();
    int ch;
    double amt1, amt2;
    account acc = new account(name, accno, type, balance);
    saveacct sav = new saveacct(name, accno, type, balance);
    curracct cur = new curracct(name, accno, balance);

    while(true)
    {
        if(acc.type.equals("savings"))
        {
            System.out.println("Menu\n 1. Deposit 2. Withdraw
            3. Compute the interest 4. Display");
            System.out.println("Enter the Choice:");
            ch = sc.nextInt();
            switch(ch)
            {
                case 1: System.out.println("Enter the amount:");
                        amt1 = sc.nextInt();
                        sav.deposit(amt1);
                        break;
```

```
case 2: System.out.println("Enter the amount:");
        amt2=sc.nextInt();
        sav.withdraw(amt2);
        break;
case 3: sav.interest();
        break;
case 4: sav.display();
        break;
case 5: System.exit(0);
default : System.out.println("Invalid input");
        break;
}
}
else{
System.out.println("Menu\n 1. Deposit 2. Withdraw
3. Display");
System.out.println("Enter the choice:");
ch=sc.nextInt();
switch(ch)
{ case 1 : System.out.println("Enter amount:");
  amt1 = sc.nextInt();
  cur.deposit(amt1);
  break;

case 2; System.out.println("Enter amount:");
        amt2= sc.nextInt();
        cur.withdraw(amt2);
        cur.checkMin();
        break;
case 3: cur.display();
        break;
case 4: System.exit(0);
}}}
```

Page No.
Date. / /

Output: (Sanjeet P. Pandit / 1BM22CS241)

Enter the name : ~~Sanjeet~~ Sanjeet

Enter the type: (current/savings):

current

Enter the account number:

1009

Enter the initial balance:

2000

Menu:

1. Deposit 2. Withdraw 3. Display

1

Enter the amount: 1000

Menu:

1. Deposit 2. Withdraw 3. Display

2.

Enter the amount: 500

Menu:

1. Deposit 2. Withdraw 3. Display

3.

Name: Sanjeet ~~Name: Sanjeet~~ Acno: 1009 type: current balance: 2500.0

Q (Generics) (Additional)

(*) output:

Popping Integers from the stack:

5

4

3

2

1

Popping doubles from the stack:

5.5

4.4

3.3

2.2

1.1