**Slip24**

[October 03, 2024](https://nilambariblogfortybsc-cs.blogspot.com/2024/10/slip24.html)

 Q1) Create an abstract class 'Bank' with an abstract method 'getBalance'. Rs.100, Rs.150 and Rs.200 are deposited in banks A, B and C respectively. 'BankA', 'BankB' and 'BankC' are subclasses of class 'Bank', each having a method named 'getBalance'. Call this method by creating an object of each of the three classes. [10 marks]

abstract class Bank

{

     abstract int getBalance();

}

class BankA extends Bank

{

 private int balance;

 void deposit(int money)

 {

balance += money;

 }

 int getBalance()

 {

     return balance;

 }

}

class BankB extends Bank

{

private int balance;

void deposit(int money)

        {

balance += money;

      }

       int getBalance()

       {

         return balance;

        }

}

class BankC extends Bank

{

   private int balance;

   void deposit(int money)

   {

      balance += money;

   }

  int getBalance()

   {

     return balance;

   }

}

public class Slip24\_1

 {

   public static void main(String[] args)

   {

BankA bankA = new BankA();

BankB bankB = new BankB();

BankC bankC = new BankC();

bankA.deposit(100);

bankB.deposit(150);

bankC.deposit(200);

System.out.println("Balance of Bank A = "+bankA.getBalance());

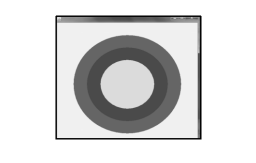
System.out.println("Balance of Bank B = "+bankB.getBalance());

System.out.println("Balance of Bank C = "+bankC.getBalance());

   }

}

Q2) Program that displays three concentric circles where ever the user clicks the mouse on a frame. The program must exit when user clicks ‘X’ on the frame. [20 marks]

[](https://blogger.googleusercontent.com/img/a/AVvXsEiiNtPQmjT6OIBw3cmLvy_-4EZF83B5cscVSDLiVqSJimdIm195VT41DkVS2FW6YfWu650wfcwBYea8c6c0FCwXkuiMPo06BQq1p5BeaYrODbw8bj7rlQX6m7km1TNV-hHb5Yk381nz_ZXbsXJGTXwSIyzTU7QylMByPr0a5yIsOGwdGPpyrNP93todgbA)

import javax.swing.\*;

import java.awt.\*;

import java.awt.event.\*;

public class Slip24\_2 extends JFrame

{

    public Slip24\_2()

    {

        setTitle("Concentric Circles");

        setSize(400, 400);

        setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

        setLocationRelativeTo(null);

        addMouseListener(new MouseAdapter()

{

            public void mouseClicked(MouseEvent e) {

                int x = e.getX();

                int y = e.getY();

                // Draw circles based on mouse click position

                getGraphics().clearRect(0, 0, getWidth(), getHeight()); // Clear the previous circles

                drawConcentricCircles(x, y);

            }

        });

        setVisible(true);

    }

    public void drawConcentricCircles(int x, int y) {

        Graphics g = getGraphics();

        g.setColor(Color.LIGHT\_GRAY);

        g.fillOval(x - 50, y - 50, 100, 100);

        g.setColor(Color.GRAY);

        g.fillOval(x - 35, y - 35, 70, 70);

        g.setColor(Color.DARK\_GRAY);

        g.fillOval(x - 20, y - 20, 40, 40);

    }

    public static void main(String[] args)

    {

        new Slip24\_2();

    }

}