**JAVA ASSIGNMENT – 4**

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Q – 1) Write a java program to display the contents of the file in reverse order.

import java.io.\*;

import java.util.\*;

public class Fq1 {

  public static void main(String[] args) throws FileNotFoundException {

    File f = new File("rohan.txt");

    Scanner input = new Scanner(f);

    String result = "";

    while (input.hasNextLine()) {

      String fjala = input.next();

      for (int i = fjala.length() - 1; i >= 0; i--) {

        result += fjala.charAt(i);

      }

    }

    input.close();

    System.out.print(result += " ");

  }

}

Q – 2) Write an awt application which will have a button with caption ‘OK’. When user will try to click on the button the button should change caption to ‘KO’.

import java.awt.\*;

import java.awt.event.\*;

public class Fq6 {

  public static void main(String[] args) {

    Frame f = new Frame("Change Caption");

    Button b = new Button("OK");

    b.setBounds(50, 100, 60, 30);

    b.addActionListener(

      new ActionListener() {

        public void actionPerformed(ActionEvent e) {

          b.setLabel("KO");

        }

      }

    );

    f.add(b);

    f.setSize(400, 400);

    f.setLayout(null);

    f.setVisible(true);

  }

}

Q – 3) Write a threaded applet which will display circle with different colours. Colour will change after 1 second. Accept radius of the circle as parameter.

import java.applet.\*;

import java.awt.\*;

/\*

    <applet code=Que10 width=300 height=300>

    </applet>

\*/

public class Que10 extends Applet implements Runnable {

  Thread t = null;

  int cnt;

  public void init() {

    cnt = 1;

  }

  public void paint(Graphics g) {

    if (cnt == 1) {

      g.setColor(Color.red);

      g.fillOval(30, 20, 60, 60);

      g.setColor(Color.black);

      g.drawOval(30, 90, 60, 60);

      g.drawOval(30, 155, 60, 60);

    } else if (cnt == 2) {

      g.setColor(Color.black);

      g.drawOval(30, 20, 60, 60);

      g.setColor(Color.yellow);

      g.fillOval(30, 90, 60, 60);

      g.setColor(Color.black);

      g.drawOval(30, 155, 60, 60);

    } else if (cnt == 3) {

      g.setColor(Color.black);

      g.drawOval(30, 20, 60, 60);

      g.drawOval(30, 90, 60, 60);

      g.setColor(Color.green);

      g.fillOval(30, 155, 60, 60);

    }

  }

  public void start() {

    t = new Thread(this, "Que9");

    t.start();

  }

  public void run() {

    for (;;) {

      try {

        if (cnt == 3) {

          cnt = 1;

        } else {

          cnt++;

        }

        repaint();

        Thread.sleep(5000);

      } catch (InterruptedException e) {

        System.out.println(e);

      }

    }

  }

}

Q – 4) Write an application which will accept 2 file names from command line. Then append the contents of file 1 to other file. Do necessary validations ?

import java.io.\*;

public class Fq2 {

  public static void main(String[] args) {

    try {

      FileReader fr = new FileReader("rohan.txt");

      FileWriter fw = new FileWriter("rohan1.txt");

      String str = " ";

      int i;

      while ((i = fr.read()) != -1) {

        str += (char) i;

      }

      fw.write(str);

      fr.close();

      fw.close();

    } catch (Exception e) {

      System.out.println("There are some IOException");

    }

  }

}

Q – 5) Write a program to count characters, words , line in a file read the file name from user.

import java.io.\*;

public class Fq5 {

  public static void main(String[] args) {

    BufferedReader reader = null;

    int chCount = 0;

    int woCount = 0;

    int liCount = 0;

    try {

      reader = new BufferedReader(new FileReader(args[0]));

      String currLine = reader.readLine();

      while (currLine != null) {

        liCount++;

        String[] words = currLine.split(" ");

        woCount = woCount + words.length;

        for (String word : words) {

          chCount = chCount + word.length();

        }

        currLine = reader.readLine();

      }

      System.out.println(

        "Number Of Chars In " + args[0] + " File : " + chCount

      );

      System.out.println(

        "Number Of Words In " + args[0] + " File : " + woCount

      );

      System.out.println(

        "Number Of Lines In " + args[0] + " File : " + liCount

      );

    } catch (Exception e) {

      System.out.println("File not found ! Please Give Proper file name.");

    }

  }

}

Q – 6) How is menu created in java ? Explain with suitable example.

import java.awt.\*;

class MenuExample {

  MenuExample() {

    Frame f = new Frame("Menu and MenuItem Example");

    MenuBar mb = new MenuBar();

    Menu menu = new Menu("Menu");

    Menu submenu = new Menu("Sub Menu");

    MenuItem m1 = new MenuItem("Item 1");

    MenuItem m2 = new MenuItem("Item 2");

    MenuItem m3 = new MenuItem("Item 3");

    MenuItem m4 = new MenuItem("Item 4");

    MenuItem m5 = new MenuItem("Item 5");

    menu.add(m1);

    menu.add(m2);

    menu.add(m3);

    submenu.add(m4);

    submenu.add(m5);

    menu.add(submenu);

    mb.add(menu);

    f.setMenuBar(mb);

    f.setSize(400, 400);

    f.setLayout(null);

    f.setVisible(true);

  }

  public static void main(String args[]) {

    new MenuExample();

  }

}

Q – 7) Write a java program to display the contents of the file in reverse order.

import java.io.\*;

import java.util.\*;

public class Fq1 {

  public static void main(String[] args) throws FileNotFoundException {

    File f = new File("rohan.txt");

    Scanner input = new Scanner(f);

    String result = "";

    while (input.hasNextLine()) {

      String fjala = input.next();

      for (int i = fjala.length() - 1; i >= 0; i--) {

        result += fjala.charAt(i);

      }

    }

    input.close();

    System.out.print(result += " ");

  }

}

Q – 8) Write a Java program to display ten buttons with labels one, two,-------, ten using flow layout. Use array of Buttons.

import java.awt.\*;

import java.awt.Button;

import java.awt.Frame;

import java.awt.event.WindowAdapter;

import java.awt.event.WindowEvent;

public class Fq7 extends Frame {

  private static final int button\_count = 10;

  public Fq7() {

    this.setVisible(true);

    this.setTitle("Rohan Dhanani");

    this.setSize(500, 500);

    this.setBackground(new Color(0x009270));

    this.addWindowListener(

        new WindowAdapter() {

          @Override

          public void windowClosing(WindowEvent e) {

            System.exit(0);

          }

        }

      );

    Button[] button = new Button[button\_count];

    for (int i = 0; i < button\_count; ++i) {

      button[i] = new Button("Button: " + i);

    }

    for (int i = 0; i < button\_count; ++i) {

      this.add(button[i]);

    }

    FlowLayout f = new FlowLayout(FlowLayout.CENTER, 15, 15);

    this.setLayout(f);

  }

  public static void main(String[] args) {

    Fq7 g = new Fq7();

  }

}

Q – 9) Write a program to copy content one file into another file replace the numbers with ‘\*’ and change the case.

import java.io.\*;

import java.util.\*;

public class Fq8 {

  public static void main(String[] args) throws Exception {

    BufferedReader b = new BufferedReader(new InputStreamReader(System.in));

    System.out.print("Enter First File Name :-");

    String f1 = b.readLine();

    System.out.print("Enter Second File Name :-");

    String f2 = b.readLine();

    FileReader fr = new FileReader(f1);

    FileWriter fw = new FileWriter(f2);

    int ch;

    while ((ch = fr.read()) != -1) {

      char ch1 = (char) ch;

      if (Character.isDigit(ch1)) {

        ch1 = '\*';

        fw.write(ch1);

      }

      fw.write(ch1);

    }

    fr.close();

    fw.close();

  }

}

Q – 10) Design a screen with two textfields and two radio buttons. Accept a number in a first textfield . If a square radio button is selected, display the square of a number in a second textfield and If a cube radio button is selected, display the cube of a number in a second textfield. If accepted number is invalid through user defined exception.

import java.awt.\*;

import java.awt.event.\*;

public class Fq9 extends Frame implements ActionListener {

  TextField tf1, tf2;

  Button b1, b2;

  Fq9() {

    tf1 = new TextField();

    tf1.setBounds(50, 50, 150, 20);

    tf2 = new TextField();

    tf2.setBounds(50, 100, 150, 20);

    tf2.setEditable(false);

    b1 = new Button("Square");

    b1.setBounds(50, 150, 50, 50);

    b2 = new Button("Cube");

    b2.setBounds(120, 150, 50, 50);

    b1.addActionListener(this);

    b2.addActionListener(this);

    add(tf1);

    add(tf2);

    add(b1);

    add(b2);

    setSize(500, 500);

    setLayout(null);

    setVisible(true);

  }

  public void actionPerformed(ActionEvent e) {

    String s1 = tf1.getText();

    int a = Integer.parseInt(s1);

    int c = 0;

    if (e.getSource() == b1) {

      c = a \* a;

    } else if (e.getSource() == b2) {

      c = a \* a \* a;

    }

    String result = String.valueOf(c);

    tf2.setText(result);

  }

  public static void main(String[] args) {

    new Fq9();

  }

}