

exp1

```
import java.util.Scanner;
class TakeInput
{
    public static void main(String args[])
    {
        String inputstring;
        System.out.println("Enter a number: ");
        Scanner scanner=new Scanner(System.in);
        inputstring=scanner.nextLine();
        int i,tab;
        for(int i=1;i<=10;i++)
        {
            tab=inputstring*i;
            System.out.println(+tab);
        }
    }
}
```

exp3

```
import java.io.IOException;

public class NotePad {
    public static void main(String[] args)
    {
        Runtime rs = Runtime.getRuntime();
        try
        {
            rs.exec("notepad.exe");
            System.out.println("Notepad opened successfully.");
        }
        catch (IOException e)
        {
            System.out.println("Error occurred: " + e.getMessage());
        }
    }
}
```

## Exp2.0

```
import java.io.DataInputStream;
```

```
class InputDemo
```

```
{
    public static void main(String args[])
    {
        int num;
        DataInputStream in = new DataInputStream(System.in);
        try
        {
            System.out.println("Please enter the number:");
            num = Integer.parseInt(in.readLine());
            System.out.println("Entered number:" + num);
        }
        catch(Exception e)
        {
            System.out.println("Error is :" + e);
        }
        finally
        {
            System.out.println("No problem");
        }
    }
}
```

## Exp 2.1

```
import java.util.Scanner;
```

```
class Main
```

```
{
    public static void main(String aishu[])
    {
        Scanner sc= new Scanner(System.in);
        System.out.println("Enter name, age and salary:");
        String name= sc.nextLine();
        int age=sc.nextInt();
        double salary= sc.nextDouble();
        System.out.println("Name = " + name);
        System.out.println("Age = " + age);
        System.out.println("Salary = " + salary);
    }
}
```

```
}
```

Exp 5.0

class Exam

```
{
    private int k;
    private String stress;
    public Exam()
    {
        this.stress = "Welcome to SE3";
    }
    public Exam(int a, int b)
    {
        this.k=a+b;
    }
    public String toString()
    {
        return stress;
    }
    public int Sum()
    {
        return k;
    }

    public static void main(String []aishu)
    {
        Exam d1=new Exam();
        Exam d2=new Exam(10,30);
        System.out.println(d1);
        System.out.println(d2.Sum());
    }
}
```

Exp 5.1

class Stress {

private String msg;

private int sum;

public Stress() {

    this.msg = "Welcome to SE3";

}

public Stress(int i, int j) {

    this.sum = i + j;

}

public int Sum(){

```

        return sum;
    }

    public String toString() {
        return msg;
    }

    public static void main(String[] aishu) {
        Stress d1 = new Stress();
        Stress d2 = new Stress(10, 20);
        System.out.println(d1);
        System.out.println(d2.Sum());
    }
}

```

## Exp 6

```

package myPackage;
    public class MyClass
    {
        public void getName(String aishu)
        {
            System.out.println(aishu);
        }
    }

import myPackage.MyClass;

    public class PrintName
    {
        public static void main(String args[])
        {
            String name = "Hello";
            MyClass obj=new MyClass();
            obj.getName(name);
        }
    }

```

## Exp 9 multilevel inheritance

```

class A
{
    protected int num = 20;
}

```

```
void welcome()
{
    System.out.println("Welcome A");
}
}
```

```
class C extends A
{
    void welcome(int a)
    {
        System.out.println("Welcome C: "+a);
    }
}
```

```
class B extends C
{
    public static void main(String args[])
    {
        B b1 = new B();
        b1.welcome();
        b1.welcome(10);
        System.out.println("Number: "+b1.num);
    }
}
```

Exp 8

```
class A
{
    protected int num = 20;
    void welcome()
    {
        System.out.println("Welcome A");
    }
}
```

```
class B2 extends A
{
    public static void main(String args[])
    {
        A a1 = new A();
        a1.welcome();
        System.out.println("Number: "+a1.num);
    }
}
```

EXp 9.0 multiple

```
interface B {
    void Welcome(int a);
}

class A {
    public void Welcome() {
        System.out.println("Welcome A");
    }
}

class CI extends A implements B {
    @Override
    public void Welcome(int a) {
        System.out.println("Welcome B = " + a);
    }

    public static void main(String[] args) {
        CI c1 = new CI();
        c1.Welcome();    // Calls Welcome() from class A
        c1.Welcome(10);  // Calls Welcome(int a) from interface B implemented in CI
    }
}
```

EXP 7

```
class StringStorage
{
    public static void main(String aishu[])
    {
        String s1 = "Nice ";
        String s2 = new String("to");
        StringBuffer s3 = new StringBuffer("meet");
        StringBuilder s4 = new StringBuilder("you");
        s4=s4.append(" all");
        System.out.println(s1);
        System.out.println(s2);
        System.out.println(s3);
        System.out.println(s4);
    }
}
```

Exp10

```
import java.lang.Throwable;
```

```

public class Test
{
    public static void main(String []aishu)
    {
        try
        {
            System.out.println("Welcome to Java");
            int sum= 9/0;
            System.out.println("2");
        }
        catch(ArithmeticException e)
        {
            System.out.println("3");
        }
        catch(Exception e)
        {
            System.out.println("4");
        }
        finally
        {
            System.out.println("5");
        }
    }
}

```

Exp 11

```

import java.util.Scanner;
public class ExceptionHandling
{
    public static void main(String[] args)
    {
        Scanner sc = new Scanner(System.in); //Declaring Scanner variable to take input from
user

        System.out.println("Enter Your Age");

        int age = sc.nextInt();    //Taking input from user

        try
        {
            if(age < 0)
            {

```

```

        throw new AgelsNegativeException("Age can not be negative"); //throws
        AgelsNegativeException if age is negative
    }
}
catch(AgelsNegativeException ex)
{
    System.out.println(ex); //Output : Age can not be negative
}
}
}
class AgelsNegativeException extends Exception
{
    String errorMessage;

    public AgelsNegativeException(String errorMessage)
    {
        this.errorMessage = errorMessage;
    }

    //Modifying toString() method to display customized error message

    @Override
    public String toString()
    {
        return errorMessage;
    }
}

```

Exp 12

```
import java.util.Scanner;
```

```

class Even extends Thread{
    @Override
    public void run(){
        int a = 3;
        int ans=a*a;
        System.out.println(ans);
    }
}

```

```

class odd extends Thread{
    @Override
    public void run(){
        int a=3;
    }
}

```



```

        int ans=a*a*a;
        System.out.println(ans);
    }
}

class MultiThreading{
    public static void main(String args[])
    {
        Scanner sc=new Scanner(System.in);
        new Even().Start();
        new Odd().Start();
    }
}

```

Exp 13:

```

import javax.swing.*;
import java.awt.*;

```

```

public class SmileyExc extends JPanel {
    public void paintComponent(Graphics g) {
        super.paintComponent(g);

        // Set color for the face
        g.setColor(Color.yellow);
        g.fillOval(20, 20, 150, 150); // Draw face

        // Set color for the eyes
        g.setColor(Color.black);
        g.fillOval(50, 60, 15, 25); // Left eye
        g.fillOval(120, 60, 15, 25); // Right eye

        // Draw the nose using a polygon
        int x[] = {95, 85, 106, 95};
        int y[] = {85, 104, 104, 85};
        g.drawPolygon(x, y, 4);

        // Draw the smile (arc) with corrected angles
        g.drawArc(55, 95, 78, 50, 0, -180); // Smile

        // Draw lines to complete the mouth
        g.drawLine(50, 126, 60, 116); // Left curve of smile
        g.drawLine(128, 115, 139, 126); // Right curve of smile
    }

    public static void main(String[] args) {
        JFrame frame = new JFrame("Smiley Face");
        SmileyExc smiley = new SmileyExc();
        frame.add(smiley);
        frame.setSize(200, 200);
    }
}

```

```

        frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
        frame.setVisible(true);
    }
}

```

#### Exp 14

```

import javax.swing.*;    // For GUI components like JFrame, JButton, JLabel, etc.
import java.awt.*;       // For layout and other graphical utilities
import java.awt.event.*; // For ActionListener

```

```

class CreateLoginForm extends JFrame implements ActionListener {
    // Declare the components
    JButton b1;
    JPanel newPanel;
    JLabel userLabel, passLabel;
    final JTextField textField1, textField2;

    // Constructor to set up the form
    CreateLoginForm() {
        // Set up user label
        userLabel = new JLabel();
        userLabel.setText("Username:"); // Set label text
        textField1 = new JTextField(15); // Set the length of the text field

        // Set up password label
        passLabel = new JLabel();
        passLabel.setText("Password:");
        textField2 = new JPasswordField(15); // Use JPasswordField for password input

        // Set up submit button
        b1 = new JButton("Submit"); // Create a button
        b1.addActionListener(this); // Add action listener to the button

        // Create a new panel to hold components
        newPanel = new JPanel(new GridLayout(3, 1)); // 3 rows, 1 column
        newPanel.add(userLabel); // Add username label to panel
        newPanel.add(textField1); // Add username text field to panel
        newPanel.add(passLabel); // Add password label to panel
        newPanel.add(textField2); // Add password text field to panel
        newPanel.add(b1); // Add the submit button to panel

        // Add the panel to the frame
        add(newPanel, BorderLayout.CENTER);

        // Set the frame properties
        setTitle("Login Form"); // Set the title of the window
        setSize(300, 150); // Set the size of the window
        setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE); // Close operation
    }

    // This method will be called when the button is clicked
}

```

```

public void actionPerformed(ActionEvent e) {
    String username = textField1.getText();    // Get the username
    String password = textField2.getText();    // Get the password

    // Display the username and password
    JOptionPane.showMessageDialog(this, "Username: " + username + "\nPassword: " +
password);
}

// Main method to run the form
public static void main(String[] args) {
    try {
        CreateLoginForm form = new CreateLoginForm(); // Create an instance of the form
        form.setVisible(true); // Set the form visibility to true
    } catch (Exception e) {
        JOptionPane.showMessageDialog(null, e.getMessage()); // Show error message if
exception occurs
    }
}
}

```