\*\*\*SLIP 1\*\*\*

Que1=>

import java.util.Scanner;

public class Main

{

public static void main(String args[])

{

Scanner s=new Scanner(System.in);

System.out.print("Enter number:");

int n=s.nextInt();

for(int i=1; i <= 10; i++)

{

System.out.println(n+" \* "+i+" = "+n\*i);

}

}

}

Que2=>

linked list not in syllabus

Que2=>

import java.sql.\*;

class DisplayPersonD {

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

Class.forName("org.postgresql.Driver"); // loading the drivers Connection con=DriverManager.getConnection("jdbc:postgresql://localhost:5432/ postgres","postgres","postgres"); //Connection of database Statement st=con.createStatement();

ResultSet rs=st.executeQuery("select \* from Person");

while(rs.next())

{

System.out.println(rs.getInt("pid")+""+rs.getString("name")+""+rs.getString("gender")+""+rs.getInt("birth\_year"));

}

con.close();

}

}

\*\*\*SLIP 2\*\*\*

Que1=>

import java.util.\*;

public class Main {

public static void main(String[] args) {

Scanner s = new Scanner(System.in);

ArrayList<Integer> numbers = new ArrayList<Integer>();

System.out.println("Enter n:- ");

int n = s.nextInt();

for (int i=0;i<n;i++)

{

System.out.println("Enter "+(i+1)+" number:- ");

int ele = s.nextInt();

numbers.add(ele);

}

System.out.println("Display Array List elements:- ");

System.out.println(numbers);

}

}

Que2=>

class MyNumber

{

private int n;

MyNumber()

{

n=0;

}

MyNumber(int n)

{

this.n=n;

}

void isNegative()

{

if(n<0)

System.out.println(n+" is a negative number");

}

void isPositive()

{

if(n>0)

System.out.println(n+" is a Positive number");

}

void isOdd()

{

if(n%2!=0)

System.out.println(n+" is Odd number");

}

void isEven()

{

if(n%2==0)

System.out.println(n+" is Even number");

}

};

class Number

{

public static void main(String args[])

{

int x = Integer.parseInt(args[0]);

MyNumber n1 = new MyNumber();

MyNumber n2 =new MyNumber(x);

n1.isNegative();

n1.isPositive();

n1.isOdd();

n1.isEven();

n2.isNegative();

n2.isPositive();

n2.isOdd();

n2.isEven();}}

QUE2=>

import java.util.Scanner;

class InvalidName extends Exception{}

class Main {

public static void main(String[] args) {

System.out.println("Enter doctor name:- ");

Scanner s = new Scanner(System.in);

String name = s.nextLine();

try{

for(int i=0;i<name.length();i++)

{

if(!Character.isLetter(name.charAt(i)))

{

throw new InvalidName();

}

}

} catch(InvalidName e)

{

System.out.println("Invalid name");

}

}

}

\*\*SLIP 3\*\*\*

Que1=>

import java.util.\*;

class Main

{

public static void main(String args[])

{

Scanner s = new Scanner(System.in);

System.out.println("Enter n:- ");

int n = s.nextInt();

int a[] = new int[n];

int sum=0;

System.out.println("Enter elements: --");

for(int i = 0;i<n;i++)

{

a[i]=s.nextInt();

sum=sum+a[i];

}

System.out.println("Sum of given array elements is "+sum);

}

}

Que2

import java.io.\*;

class Main{

int ano;

String aname;

float balance;

Account(){

}

Account(int ano,String aname,float balance)

{

this.ano=ano;

this.aname=aname;

this.balance=balance;

}

void display()

{

System.out.println("Account No.:-- "+ano);

System.out.println("Account Name.:-- "+aname);

System.out.println("Account Balance.:-- "+balance);

}

};

class SortAccount{

static void sortAcc(Account a[],int n){

Account a1 = new Account();

System.out.println("Display Accounts in sorted order:-- ");

for(int i=0;i<n;i++){

for(int j=i+1;j<n;j++){

if(a[i].balance>a[j].balance){

a1=a[i];

a[i]=a[j];

a[j]=a1;

}

}

}

for(int i=0;i<n;i++{

a[i].display();

}

}

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

BufferedReader b = new BufferedReader(new

InputStreamReader(System.in));

System.out.println("Enter n:-- ");

int n = Integer.parseInt(b.readLine());

Account [] a = new Account[n];

System.out.println("Enter "+n+" account details:-- ");

int ano;

String aname;

float balance;

for(int i=0;i<n;i++)

{

System.out.println("Enter details of account "+i);

System.out.println("Enter account no:-- ");

ano=Integer.parseInt(b.readLine());

System.out.println("Enter account name:-- ");

aname=b.readLine();

System.out.println("Enter account Balance:-- ");

balance=Float.parseFloat(b.readLine());

a[i]=new Account(ano,aname,balance);

}

System.out.println("Display all account details:-- ");

for(int i=0;i<n;i++)

{

a[i].display();

}

sortAcc(a,n);

}

}

\*\*\*SLIP 4\*\*\*

Que1

import java.util.Scanner;

public class Greet\_User {

public static void main(String[] args) {

System.out.println("Enter your name:- ");

Scanner s = new Scanner(System.in);

String name = s.nextLine();

System.out.println("Hello "+name.toUpperCase()+"nice to meet you");

}

}

Que2

import javax.swing.\*;

import java.awt.event.\*;

public class ass4\_a4{

JFrame f;

ass4\_a4() {

f = new JFrame("ComboBox Example");

JLabel label = new JLabel();

label.setHorizontalAlignment(JLabel.CENTER);

label.setSize(400, 100);

JButton b = new JButton("Show");

b.setBounds(200, 100, 75, 20);

String languages[] = { "C", "C++", "C#", "JAVA", " PHP" };

JComboBox cb = new JComboBox(languages);

cb.setBounds(50, 100, 90, 20);

f.add(cb);

f.add(label);

f.add(b);

f.setLayout(null);

f.setSize(350, 350);

f.setVisible(true);

f.setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

b.addActionListener(new ActionListener() {

public void actionPerformed(ActionEvent e) {

String data = "Programming language Selected:" +

cb.getItemAt(cb.getSelectedIndex());

label.setText(data);

}

});

}

public static void main(String args[]) {

new ass4\_a4();

}

}

Que2

import java.util.Scanner;

public class Main {

int empid;

String name;

float price;

public void getInput() {

Scanner in = new Scanner(System.in);

System.out.print("Enter the product id :: ");

empid = in.nextInt();

System.out.print("Enter the product name :: ");

name = in.next();

System.out.print("Enter the product price :: ");

price = in.nextFloat();

}

public void display() {

System.out.println("Product id = " + empid);

System.out.println("Product name = " + name);

System.out.println("Product price = " + price);

}

public static void main(String[] args) {

Main e[] = new Main[5];

for(int i=0; i<5; i++) {

e[i] = new Main();

e[i].getInput();

}

System.out.println("\*\*\*\* Data Entered as below \*\*\*\*");

for(int i=0; i<5; i++) {

e[i].display();

System.out.println("\n");

}

}

}

\*\*\*SLIP 5\*\*\*

Que1

import java.util.Scanner;

class ZeroException extends Exception{}

public class Main {

public static void main(String[] args) {

System.out.println("Enter number:- .");

Scanner s = new Scanner(System.in);

int n = s.nextInt();

try {

if (n == 0) {

throw new ZeroException();

}

else

{

fact(n);

}

}

catch (ZeroException e)

{

System.out.println("Error !! Number is 0");

}

}

public static void fact(int n)

{

int fact =1;

for (int i=1;i<=n;i++)

{

fact\*=i;

}

System.out.println("Factorial of "+n+" is "+fact);

}

}

Que2

class Point

{

int x,y;

Point()

{

x=0;

y=0;

}

Point(int x,int y)

{

this.x=x;

this.y=y;

}

void display()

{

System.out.println("Point :- "+x+","+y);

}

}

class ColorPoint extends Point

{

private String color;

ColorPoint(){

super();

this.color="";

}

ColorPoint(int x,int y,String color)

{

super(x,y);

this.color=color;

}

void displayColorPoint()

{

System.out.println("Color Point:- "+x+","+y+"\n Color:- "+color);

}

}

class Point3D extends Point

{

int z;

Point3D()

{

super();

z=0;

}

Point3D(int x,int y,int z){

super(x,y);

this.z=z;

}

void displayPoint3D(){

System.out.println("Point :- "+x+","+y+","+z);

}

}

class Main

{

public static void main(String[] args) {

Point p = new Point(10,20);

p.display();

ColorPoint cp = new ColorPoint(30,40,"RED");

cp.displayColorPoint();

Point3D pd = new Point3D(50,60,70);

pd.displayPoint3D();}}

Que2

import java.sql.\*;

import java.util.\*;

class EmployeeDataFromUser {

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

Scanner sc=new Scanner(System.in)

System.out.println("Enter ID: ");

int id=sc.nextInt();

System.out.println("Enter Name: ");

String name=sc.next();

System.out.println("Enter Salary: ");

int salary=sc.nextInt();

Class.forName("org.postgresql.Driver");

Connection con=DriverManager.getConnection("jdbc:postgresql://localhost:5432/ postgres","postgres","postgres");

PreparedStatement psmt=con.prepareStatement("insert into Employee values(?,?,?)");

psmt.setInt(1,id);

psmt.setString(2,name);

psmt.setInt(3,salary);

psmt.executeUpdate();

System.out.println("Data Saved From USer");

con.close();

} }

\*\*\*SLIP 6\*\*\*

Que1

import java.util.\*;

public class Main {

public static void main(String[] args) {

Scanner s = new Scanner(System.in);

System.out.println("Enter n:- ");

int n = s.nextInt();

TreeSet<Integer> numbers = new TreeSet<>();

for (int i=0;i<n;i++)

{

System.out.println("Enter "+(i+1)+" Element:- ");

int ele = s.nextInt();

numbers.add(ele);

}

System.out.println(numbers);

System.out.println("Enter a number to be searched:- ");

int search = s.nextInt();

if (numbers.contains(search))

{

System.out.println("Element Found!!");

}

else

{

System.out.println("Element not found!!");

}

}

}

Que2

import java.util.Scanner;

class Employee

{

int id;

String name;

double sal;

Employee(){}

Employee(int id,String name,double sal)

{

this.id = id;

this.name= name;

this.sal = sal;

}

}

class Main {

public static void main(String[] args) {

Employee p[] = new Employee[5];

Scanner s = new Scanner(System.in);

System.out.println("Enter the details of 5 Employees:- ");

for (int i=0;i<5;i++)

{

System.out.println("Enter Details of Employee "+(i+1));

System.out.println("Enter id:- ");

int id = s.nextInt();

System.out.println("Enter name:- ");

s.nextLine();

String name = s.nextLine();

System.out.println("Enter salary:- ");

double sal = s.nextDouble();

p[i] = new Employee(id,name,sal);

}

System.out.println("The Product having maximum price:- ");

max(p);

}

public static void max(Employee p[])

{

double max = p[0].sal;

for (int i=1;i<5;i++)

{

if (max<p[i].sal)

{

max=p[i].sal;

}

}

for (int i=0;i<5;i++)

{

if (p[i].sal==max)

{

System.out.println(p[i].name);

break;

}

}

}

}

Que2

import javax.swing.\*;

class Main extends JFrame {

JTextField l;

Main(){

setTitle("calculator");

l = new JTextField(16);

JButton b0, b1, b2, b3, b4, b5, b6, b7, b8, b9, ba, bs, bd, bm, be,

bc,beq;

b0 = new JButton("0");

b1 = new JButton("1");

b2 = new JButton("2");

b3 = new JButton("3");

b4 = new JButton("4");

b5 = new JButton("5");

b6 = new JButton("6");

b7 = new JButton("7");

b8 = new JButton("8");

b9 = new JButton("9");

beq = new JButton("=");

ba = new JButton("+");

bs = new JButton("-");

bd = new JButton("/");

bm = new JButton("\*");

bc = new JButton("Clear");

be = new JButton(".");

JPanel p = new JPanel();

p.add(l);

p.add(b7);

p.add(b8);

p.add(b9);

p.add(bd);

p.add(b4);

p.add(b5);

p.add(b6);

p.add(bm);

p.add(b1);

p.add(b2);

p.add(b3);

p.add(bs);

p.add(be);

p.add(b0);

p.add(beq);

p.add(ba);

p.add(bc);

add(p);

setSize(200, 220);

setResizable(false);

setVisible(true);

setDefaultCloseOperation(JFrame.EXIT\_ON\_CLOSE);

}

public static void main(String[] args) {

new Main();}

}

\*\*\*SLIP 7\*\*\*

Que1

import java.util.\*;

class Main {

public static void main(String[] args) {

Hashtable<String,Double> htb=new Hashtable<>();

Scanner sc=new Scanner(System.in);

System.out.println("Enter your limit of employee:");

int n=sc.nextInt();

System.out.println("Enter your employee info:");

for(int i=0;i<n;i++){

System.out.print("Enter employee name:");

String name=sc.next();

System.out.print("Enter employee salary: ");

double sal=sc.nextDouble();

htb.put(name,sal);

}

System.out.println("Display data");

Enumeration<String> e=htb.keys();

while(e.hasMoreElements()){

String key=e.nextElement();

System.out.println("name:"+key+" Salary:"+htb.get(key));

}

}

}

Que2

import java.util.Scanner;

class student{

String name;

int rno;

double percentage;

student(int rno,String name,double percentage)

{

this.name=name;

this.rno=rno;

this.percentage=percentage;

}

}

public class Main {

public static void main(String[] args) {

student st[] = new student[5];

Scanner s = new Scanner(System.in);

System.out.println("Enter the details of 5 students:- ");

for (int i=0;i<2;i++)

{

System.out.println("Enter Details of students "+(i+1));

System.out.println("Enter rno:- ");

int rno = s.nextInt();

System.out.println("Enter name:- ");

s.nextLine();

String name = s.nextLine();

System.out.println("Enter percentage:- ");

double per = s.nextDouble();

st[i] = new student(rno,name,per);

}

for (int i=0;i<2;i++)

{

System.out.println("Display Student "+(i+1)+" details");

System.out.println("Name:- "+st[i].name);

System.out.println("Rno:- "+st[i].rno);

System.out.println("Percentage:- "+st[i].percentage);

}

}

}

\*\*\*SLIP 8\*\*\*

Que1

class Main

{

public static void main(String[] args) {

int n = Integer.parseInt(args[0]);

int rev=0;

int temp=n;

while(n>0)

{

int rem = n%10;

rev=(rev\*10)+rem;

n=n/10;

}

System.out.println("Reverse of "+temp+" is "+rev);

}

}

Que2

import java.util.Scanner;

class InvalidDate extends Exception{}

class Date {

int dd,mm,yy;

Date()

{

dd=0;

mm=0;

yy=0;

}

void accept() {

Scanner s = new Scanner(System.in);

System.out.println("Enter day:- ");

int day = s.nextInt();

System.out.println("Enter month:- ");

int mon = s.nextInt();

System.out.println("Enter year:- ");

int year = s.nextInt();

try {

if (!checkDate(day, mon, year)) {

throw new InvalidDate();

}

else

{

dd=day;

mm=mon;

yy=year;

}

}

catch (InvalidDate e)

{

System.out.println("Invalid Date!!");

}

}

void display()

{

System.out.println(dd+"-"+mm+"-"+yy);

}

boolean checkDate(int dd,int mm,int yy)

{

if (yy<1 || mm>12 || dd<1 || mm<1)

{

return false;

}

int Totaldays=31;

if (mm==1 || mm==3 || mm==5 || mm==7 || mm==8 || mm==10 ||

mm==12)

{

Totaldays=31;

}

else if (mm==4 || mm==6 || mm==9 || mm==11)

{

Totaldays=30;

}

else if (mm==2) {

if (yy % 4 == 0 && (yy % 100 != 0 || yy % 400 == 0)) {

Totaldays = 29;

} else

{

Totaldays=28;

}

}

if (dd<=Totaldays)

{

return true;

}

return false;

}

}

class Main

{

public static void main(String[] args) {

Date d = new Date();

d.accept();

d.display();

}

}

Que2

import java.sql.\*;

class PersonResultSet {

public static void main(String args[])throws Exception { Class.forName("org.postgresql.Driver");// loading the drivers Connection con=DriverManager.getConnection("jdbc:postgresql://localhost:5432/ postgres","postgres","postgres"); //Connection of database Statement st=con.createStatement();

ResultSet rs=st.executeQuery("select \* from Person");

ResultSetMetaData rsmd = rs.getMetaData();

int n= rsmd.getColumnCount();

System.out.println("Number Of Columns Available: "+n);

for(int i=1;i<=n;i++){

System.out.println("Type Of The Column : "+rsmd.getColumnTypeName(i)); } } }

\*\*\*SLIP 9\*\*\*

Que1

import java.io.\*;

public class Main {

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

BufferedReader b = new BufferedReader(new

InputStreamReader(System.in));

System.out.println("Enter n:- ");

int n = Integer.parseInt(b.readLine());

int sum = 0;

for (int i = 1; i < n; i++)

{

if (n%i==0)

{

sum+=i;

}

}

if (sum == n)

{

System.out.println(n+" is a perfect number..!!");

}

else {

System.out.println(n+ " is not a perfect number..!!");

}

}

}

Que2

class Point

{

int x,y;

Point()

{

x=0;

y=0;

}

Point(int x,int y)

{

this.x=x;

this.y=y;

}

void display()

{

System.out.println("Point :- "+x+","+y);

}

}

class ColorPoint extends Point

{

private String color;

ColorPoint(){

super();

this.color="";

}

ColorPoint(int x,int y,String color)

{

super(x,y);

this.color=color;

}

void displayColorPoint()

{

System.out.println("Color Point:- "+x+","+y+"\n Color:- "+color);

}

}

class Point3D extends Point

{

int z;

Point3D()

{

super();

z=0;

}

Point3D(int x,int y,int z)

{

super(x,y);

this.z=z;

}

void displayPoint3D()

{

System.out.println("Point :- "+x+","+y+","+z);

}

}

class Main

{

public static void main(String[] args) {

Point p = new Point(10,20);

p.display();

ColorPoint cp = new ColorPoint(30,40,"RED");

cp.displayColorPoint();

Point3D pd = new Point3D(50,60,70);

pd.displayPoint3D();

}

}

\*\*\*SLIP 10\*\*\*

Que1

import java.util.Scanner;

class Main {

public static void main(String[] args) {

Scanner sc= new Scanner(System.in);

System.out.println("Enter a number to check if it is truly prime number or not: ");

int number= sc.nextInt();

if(isPrime(number)) {

System.out.println(number + " is prime number");

}

else{

System.out.println(number + " is a non-prime number");

}

}

static boolean isPrime(int num)

{

if(num<=1)

{

return false;

}

for(int i=2;i<=num/2;i++)

{

if((num%i)==0)

return false;

}

return true;

}

}

Que2

package is not easy to run

Que2

import java.util.Scanner;

class InsufficientFundException extends Exception{

public InsufficientFundException()

{

super("Balance is not sufficient for withdraw operation.");

}

}

class savingAccount{

static int ano;

static String name;

static double bal;

savingAccount()

{

ano = 1;

name = "Pratik";

bal = 20000.00;

}

public static void withdraw(){

System.out.println("Enter amount to withdraw:- ");

Scanner s = new Scanner(System.in);

double amt = s.nextDouble();

try{

if (bal<=500.00 && amt<bal)

{

throw new InsufficientFundException();

}

else

{

if (amt<=bal-500) {

bal -= amt;

System.out.println("Amount Deducted..!!");

}

else

{

throw new InsufficientFundException();

}

}

}

catch (InsufficientFundException e)

{

System.out.println(e.getMessage());

}

}

public static void deposit(){

System.out.println("Enter Amount to deposit:- ");

Scanner s = new Scanner(System.in);

double amt = s.nextDouble();

bal+=amt;

System.out.println("Amount Deposited..!!");

}

public static void viewBalance(){

System.out.println("Acc no:- "+ano);

System.out.println("Name :-- "+name);

System.out.println("Balance:- "+bal);

}

}

public class Main extends savingAccount{

public static void main(String[] args) {

int ch;

savingAccount s1= new savingAccount();

Scanner s = new Scanner(System.in);

do {

System.out.println("1.Check Balance:- ");

System.out.println("2.Withdraw ");

System.out.println("3.Deposit");

System.out.println("Enter your choice:- ");

ch = s.nextInt();

switch (ch)

{

case 1:viewBalance();

break;

case 2: withdraw();

break;

case 3:deposit();

break;

case 4: System.exit(0);

default:

System.out.println("Invalid Choice..");

break;

}}while (ch!=4);

}

}

\*\*\*SLIP 11\*\*\*

Que1

public class MyDate {

int dd,mm,yy;

MyDate(){

dd=0;

mm=0;

yy=0;

}

MyDate(int dd,int mm,int yy){

this.dd=dd;

this.mm=mm;

this.yy=yy;

}

void display(){

System.out.println(dd+"--"+mm+"--"+ yy);

}

}

class MyDateCall{

public static void main(String args[]){

MyDate m1=new MyDate();

m1.display();

MyDate m2=new MyDate(11,05,2023);

m2.display();

}

}

Que2

abstract class shape{

abstract void area();

abstract void volume();

}

class cylinder extends shape{

final double PI = 3.142;

int r ,h;

cylinder(int r,int h)

{

this.r=r;

this.h=h;

}

@Override

void area() {

double area = 2\*PI\*r\*(h+r);

System.out.println("Area of Cylinder:- "+area);

}

@Override

void volume() {

double volume = PI\*r\*r\*h;

System.out.println("Volume of Cylinder:- "+volume);

}

}

public class Main {

public static void main(String[] args) {

cylinder c = new cylinder(10,20);

c.area();

c.volume();

}

}

Que2

file handling need to learn

\*\*\*SLIP 12\*\*\*

Que1

//squ.java

package Series;

public class squ {

public static void squareSeries(int n) {

for(int i=1;i<=n;i++) {

System.out.print(i\*i+"\t");

}

} }

//SeriesDemo.java

import Series.\*;

import java.util.\*;

class SeriesDemo {

public static void main(String args[]) {

Scanner s = new Scanner(System.in);

System.out.print("Enter n:- ");

int n=s.nextInt();

System.out.println("Display square series upto n:- ");

Series.squ.squareSeries(n);

System.out.println();

} }

Que2

import javax.swing.\*;

import java.awt.\*;

public class ass4\_a1

{

JFrame f=new JFrame("Login");

ass4\_a1(){

JLabel L1=new JLabel("Password");

L1.setBounds(100,210,150,100);

JTextField j1=new JTextField();

j1.setBounds(180,250,150,30);

JLabel L2=new JLabel("Username");

L2.setBounds(100,190,150,50);

JTextField j2=new JTextField();

j2.setBounds(180,200,150,30);

JButton b1=new JButton("Login");

b1.setBounds(150,300,100,30);

JButton b2=new JButton("Reset");

b2.setBounds(290,300,100,30);

f.add(L1);

f.add(j1);

f.add(L2);

f.add(j2);

f.add(b1);

f.add(b2);

f.setSize(600,800);

f.setLayout(null);

f.setVisible(true);

}

public static void main(String args[]){

new ass4\_a1();

}

}

Que2

abstract class shape{

abstract void area();

abstract void volume();

}

class cylinder extends shape{

final double PI = 3.142;

int r ,h;

cylinder(int r,int h)

{

this.r=r;

this.h=h;

}

@Override

void area() {

double area = 2\*PI\*r\*(h+r);

System.out.println("Area of Cylinder:- "+area);

}

@Override

void volume() {

double volume = PI\*r\*r\*h;

System.out.println("Volume of Cylinder:- "+volume);

}

}

public class Main {

public static void main(String[] args) {

cylinder c = new cylinder(10,20);

c.area();

c.volume();

}

}

\*\*\*SLIP 13\*\*\*

Que1

import java.util.\*;

class Main{

public static void main(String[] args) {

List<String> fruitList = new LinkedList<String>();

fruitList.add("Apple");

fruitList.add("Banana");

fruitList.add("Guava");

fruitList.add("Orange");

System.out.println("Display Fruits list:- ");

Iterator i = fruitList.iterator();

while(i.hasNext())

{

System.out.print(i.next()+"\t");

}

System.out.println("");

}

}

Que2

import java.util.Scanner;

interface Operation

{

double PI = 3.142;

abstract void area();

abstract void volume();

}

class circle implements Operation

{

private double r;

circle()

{

r=10;

}

public void area() {

double a = PI\*r\*r;

System.out.println("Area of circle :- "+a);

}

public void volume() {

double v = 2\*PI\*r;

System.out.println("Circumference of circle:- "+v);

}

}

class cylinder implements Operation

{

private double r,h;

cylinder()

{

r=10;

h=20;

}

public void area() {

double a = 2\*PI\*r\*(h+r);

System.out.println("Area of cylinder:- "+a);

}

public void volume() {

double v = PI\*r\*r\*h;

System.out.println("Volume of cylinder:- "+v);

}

}

class Main

{

public static void main(String[] args) {

circle c = new circle();

c.area();

c.volume();

cylinder c1 = new cylinder();

c1.area();

c1.volume();

}

}

Que2

import java.util.Scanner;

class student {

String name;

int age;

int rno;

String course;

student()

{

name="";

age=0;

rno=0;

course="";

}

student(String name,int age,int rno,String course)

{

this.name=name;

this.age=age;

this.rno=rno;

this.course=course;

}

}

class InvalidAge extends Exception

{

}

public class Main{

public static void main(String[] args) {

Scanner s = new Scanner(System.in);

System.out.println("Enter Name:- ");

String name=s.nextLine();

System.out.println("Enter age:- ");

int age = s.nextInt();

System.out.println("Enter rno:- ");

int rno = s.nextInt();

System.out.println("Enter course:- ");

String course = s.nextLine();

course = s.nextLine();

try{

if(age>15 && age<21)

{

student s1 = new student(name,age,rno,course);

}

else

{

throw new InvalidAge();

}

}

catch(InvalidAge e)

{

System.out.println("Invalid Age");

}

}

}

\*\*\*SLIP 14\*\*\*

Que1

Que2

import java.util.Scanner;

interface Operation

{

double PI = 3.142;

abstract void area();

abstract void volume();

}

class circle implements Operation

{

private double r;

circle()

{

r=10;

}

public void area() {

double a = PI\*r\*r;

System.out.println("Area of circle :- "+a);

}

public void volume() {

double v = 2\*PI\*r;

System.out.println("Circumference of circle:- "+v);

}

}

class cylinder implements Operation

{

private double r,h;

cylinder()

{

r=10;

h=20;

}

public void area() {

double a = 2\*PI\*r\*(h+r);

System.out.println("Area of cylinder:- "+a);

}

public void volume() {

double v = PI\*r\*r\*h;

System.out.println("Volume of cylinder:- "+v);

}

}

class Main

{

public static void main(String[] args) {

circle c = new circle();

c.area();

c.volume();

cylinder c1 = new cylinder();

c1.area();

c1.volume();

}

}

Que2

import java.util.Scanner;

class student {

String name;

int age;

int rno;

String course;

student()

{

name="";

age=0;

rno=0;

course="";

}

student(String name,int age,int rno,String course)

{

this.name=name;

this.age=age;

this.rno=rno;

this.course=course;

}

}

class InvalidAge extends Exception

{

}

public class Main{

public static void main(String[] args) {

Scanner s = new Scanner(System.in);

System.out.println("Enter Name:- ");

String name=s.nextLine();

System.out.println("Enter age:- ");

int age = s.nextInt();

System.out.println("Enter rno:- ");

int rno = s.nextInt();

System.out.println("Enter course:- ");

String course = s.nextLine();

course = s.nextLine();

try{

if(rno>13001 && rno<13080)

{

student s1 = new student(name,age,rno,course);

System.out.println("\*\*\* "+s1.name+" rno is within the range\*\*\*");

}

else

{

throw new InvalidAge();

}

}

catch(InvalidAge e)

{

System.out.println("Roll no is not within the range");

}

}

}

\*\*\*SLIP 15\*\*\*

Que1

import java.util.\*;

class fruits\_reverse {

public static void main(String[] args) {

List fruitList = new LinkedList();

fruitList.add("Apple");

fruitList.add("Banana");

fruitList.add("Guava");

fruitList.add("Orange");

System.out.println("Display Fruits list in reverse:- ");

ListIterator i = fruitList.listIterator(fruitList.size());

while(i.hasPrevious()) {

System.out.print(i.previous()+"\t");

}

System.out.println("");

}

}

Que2

class Employee

{

String name;

double salary;

Employee(String name,double salary)

{

this.name=name;

this.salary=salary;

}

}

class Developer extends Employee

{

String projectName;

Developer(String name,double salary,String projectName)

{

super(name,salary);

this.projectName=projectName;

}

void display()

{

System.out.println("Display Employee Details:- ");

System.out.println("Name:- "+name);

System.out.println("salary:- "+salary);

System.out.println("Project Name:- "+projectName);

}

}

public class Main

{

public static void main(String[] args) {

Developer p = new

Developer("Pratik",10000,"AssignMate");

p.display();

}

}

Que2

import java.io.\*;

import java.util.\*;

import jakarta.servlet.\*;

import jakarta.servlet.http.\*;

public class WelcomeIP extends HttpServlet {

Hashtable accesses = new Hashtable();

public void doGet(HttpServletRequest req, HttpServletResponse res) throws ServletException, IOException {

res.setContentType("text/html");

PrintWriter out = res.getWriter();

String remoteAddr = req.getRemoteAddr();

if (remoteAddr == null) {

out.println("Welcome!");

}

else {

out.println("IP address : " + remoteAddr + "!<br>”);

Date lastAccess = (Date) accesses.get(remoteAddr);

if (lastAccess == null) {

out.println("Welcome IP Address Of Client!");

}

else {

out.println("Welcome-Back IP Address Of Client: ");

}

accesses.put(remoteAddr, new Date());

} // ...Continue handling the request... } }

\*\*\*SLIP 16\*\*\*

Que1

class MyNumber

{

private int n;

MyNumber(int n)

{

this.n=n;

}

boolean isEven()

{

if (n%2==0)

{

return true;

}

else

{

return false;

}

}

}

public class Even {

public static void main(String[] args) {

int n = Integer.parseInt(args[0]);

MyNumber num = new MyNumber(n);

if(num.isEven())

{

System.out.println(n+" is Even");

}

else

{

System.out.println(n+" is not Even");

}

}

}

Que2

class Employee

{

String name;

double salary;

Employee(String name,double salary)

{

this.name=name;

this.salary=salary;

}

}

class Programmer extends Employee

{

String progLanguage;

Programmer(String name,double salary,String

progLanguage)

{

super(name,salary);

this.progLanguage=progLanguage;

}

void display()

{

System.out.println("Display Employee Details:- ");

System.out.println("Name:- "+name);

System.out.println("salary:- "+salary);

System.out.println("Programming Language:- "+progLanguage);

}

}

class Main

{

public static void main(String[] args) {

Programmer p = new

Programmer("Pratik",10000,"Java");

p.display();

}

}

Que2

import java.sql.\*;

class UpdateStudent {

public static void main(String args[])throws Exception { Class.forName("org.postgresql.Driver");// loading the drivers Connection con=DriverManager.getConnection("jdbc:postgresql://localhost:5432/ postgres","postgres","postgres"); //Connection of database 13

Statement st=con.createStatement();

st.executeUpdate("update Course set number\_of\_students=1000 where name='BCA Science'");

System.out.println("Number of student updated..");

con.close();

} }

\*\*\*SLIP 17\*\*\*

Que1

class MyNumber

{

private int n;

MyNumber(int n)

{

this.n=n;

}

oolean osOdd()

{

if (n%2!=0)

{

return true;

}

else

{

return false;

}

}

}

public class Odd {

public static void main(String[] args) {

int n = Integer.parseInt(args[0]);

MyNumber num = new MyNumber(n);

if(num.isOdd())

{

System.out.println(n+ ” is Even”);

}

else

{

System.out.println(n+” is not Even”);

}

}

}

Que2

public class Student {

public int rollno;

public String name;

private static int objectCount = 0;

public Student() {

objectCount++;

}

public Student(int rollno, String name) {

this.rollno = rollno;

this.name = name;

objectCount++;

}

public static void displayObjectCount() {

System.out.println(“Number of objects created: “ + objectCount);

}

public static void main(String[] args) {

Student student1 = new Student(1, “Alice”);

Student.displayObjectCount();

Student student2 = new Student(2, “Bob”);

Student.displayObjectCount();

Student student3 = new Student(3, “Charlie”);

Student.displayObjectCount();

}

}

Que2

index.html

<html>

<title>Arithmatic </title>

<body>

<form method="post" action="ArithmaticOperation.jsp">

<fieldset style="width:30%; background-color:#b3d1ff">

<h2><center> Arithmatic Operation</center></h2>

<hr>

<font size=5 face="Times New Roman">

<input type="radio" name="r1" value="add"

checked>Addition</input><br>

<input type="radio" name="r1"

value="sub">Subtraction</input><br>

<input type="radio" name="r1" value="mul"

>Multiplication</input><br>

<input type="radio" name="r1" value="div"

>Division</input><br>

</font>

<table>

<tr>

<td>Enter First No:</td>

<td> <input type="text" name="n1" value=""></td>

</tr>

<tr>

<td>Enter Second No: </td>

<td><input type="text" name="n2" value=""></td>

</tr><br>

<tr>

<td></td>

<td><input type="submit" name="result"

value="Submit!"></td>

</tr>

</table>

</fieldset>

</form>

</body>

</html>

ArithmaticOperation.jsp

<html>

<body>

<H1><center>Result for

<%=request.getParameter("r1")%></center></H1>

<%

String s1=request.getParameter("n1");

String s2=request.getParameter("n2");

int num1=Integer.parseInt(s1);

int num2=Integer.parseInt(s2);

int op=0;

String str=request.getParameter("r1");

if(str.equals("add"))

op=num1+num2;

if(str.equals("sub"))

op=num1-num2;

if(str.equals("mul"))

op=num1\*num2;

if(str.equals("div"))

op=num1/num2;

%>

Result is: <%=op%>

</body>

</html>

\*\*\*SLIP 18\*\*\*

Que1

import java.io.\*;

class factors

{

public static void main(String[] args) {

int n = Integer.parseInt(args[0]);

System.out.println(" Factors of "+n+ " are ");

for (int i = 1;i<=n;i++)

{

if (n%i==0)

{

System.out.print(i);

}

}

}

}

Que2

file handling not done yet

Que2

swing need to do

\*\*\*SLIP 19\*\*\*

Que1

import java.util.Scanner;

public class MaxNumberFromArray {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter the number of elements (n): ");

int n = scanner.nextInt();

int[] numbers = new int[n];

for (int i = 0; i < n; i++) {

System.out.print("Enter number " + (i + 1) + ": ");

numbers[i] = scanner.nextInt();

}

int maxNumber = numbers[0];

for (int i = 1; i < n; i++) {

if (numbers[i] > maxNumber) {

maxNumber = numbers[i];

}

}

System.out.println("Maximum number in the array: " + maxNumber);

}

}

Que2

import java.util.Scanner;

abstract class Order {

protected int id;

protected String description;

public Order(int id, String description) {

this.id = id;

this.description = description;

}

abstract void accept();

abstract void display();

}

class PurchaseOrder extends Order {

private String customerName;

public PurchaseOrder(int id, String description, String customerName) {

super(id, description);

this.customerName = customerName;

}

//@Override

void accept() {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter Customer Name: ");

customerName = scanner.nextLine();

}

//@Override

void display() {

System.out.println("Order ID: " + id);

System.out.println("Description: " + description);

System.out.println("Customer Name: " + customerName);

}

}

class Main {

public static void main(String[] args) {

PurchaseOrder order1 = new PurchaseOrder(1, "Item 1", "John Doe");

PurchaseOrder order = new PurchaseOrder(2, "Item 2", "JaneSmith");

PurchaseOrder order3 = new PurchaseOrder(3, "Item 3", "BobJohnson");

System.out.println("\nDetails of Purchase Order 1:");

order1.display();

System.out.println("\nDetails of Purchase Order 2:");

order2.display();

System.out.println("\nDetails of Purchase Order 3:");

order3.display();

}

}

Que2

DateSrv.java

import java.io.\*;

import javax.servlet.\*;

public class DateSrv extends GenericServlet

{

public void service(ServletRequestreq, ServletResponse res) throws

IOException, ServletException

{

res.setContentType("text/html");

PrintWriterpw = res.getWriter();

java.util.Date date = new java.util.Date();

pw.println("<h2>"+"Current Date & Time: "

+date.toString()+"</h2>");

pw.close();

}

}

\*\*\*SLIP 20\*\*\*

Que1

import java.util.Arrays;

public class temp {

public static void main(String[] args) {

int[] numbers = new int[3];

for (int i = 0; i < 3; i++) {

numbers[i] = Integer.parseInt(args[i]);

}

Arrays.sort(numbers);

System.out.println("Sorted numbers: " + Arrays.toString(numbers));

}

}

Que2

public class Main {

private int id;

private String name;

private String deptName;

private double salary;

private static int objectCount = 0;

public Main() {

objectCount++;

}

// Parameterized constructor

public Main(int id, String name, String deptName, double salary) {

super();

this.id = id;

this.name = name;

this.deptName = deptName;

this.salary = salary;

objectCount++;

}

public void displayDetails() {

System.out.println("\nEmployee2 ID: " + id);

System.out.println("Name: " + name);

System.out.println("Department Name: " + deptName);

System.out.println("Salary: " + salary);

}

public static void displayObjectCount() {

System.out.println("Number of Employee objects created: " +objectCount);

}

public static void main(String[] args) {

Main emp1 = new Main(1, "John Doe", "HR", 50000.0);

emp1.displayDetails();

emp1.displayObjectCount();

Main emp2 = new Main(2, "Jane Smith", "IT", 60000.0);

emp2.displayDetails();

emp2.displayObjectCount();

Main emp3 = new Main(3, "Bob Johnson", "Finance", 55000.0);

emp3.displayDetails();

emp3.displayObjectCount();

}

}

Que2

JSP need to do