VISVESVARAYATECHNOLOGICAL UNIVERSITY

"JnanaSangama", Belgaum -590014, Karnataka.



LAB REPORT

on

ObjectOrientedJavaProgramming (23CS3PCOOJ)

Submitted by

ABDUL AHAD (1BM23AI002)

in partial fulfillment for the award of the degree of

BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE AND ENGINEERING



B.M.S. COLLEGE OF ENGINEERING

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B.M.S. College of Engineering,

Bull Temple Road, Bangalore 560019

(Affiliated To Visvesvaraya Technological University, Belgaum)

Department of Computer Science and Engineering



CERTIFICATE

This is to certify that the Lab work entitled "OBJECT ORIENTED JAVA PROGRAMMING" carried out by **ABDUL AHAD(1BM23AI002)** who is bonafide student of **B.M.S.** College of **Engineering.** It is in partial fulfillment for the award of **Bachelor of Engineering in Computer Science and Engineering** of the Visvesvaraya Technological University, Belgaum. The Lab report has been approved as it satisfies the academic requirements in respect of an Artificial Intelligence (23CS5PCAIN) work prescribed for the said degree.

Ms AMBUJA K Assistant Professor DepartmentofCSE,BMSCE Mrs SWATHI SRIDHARAN Department of CSE, BMSCE

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Program 1

```
Code:
import java.util.Scanner;
public class lab1{
  public static void main(String[] args) {
     Scanner sc = new Scanner(System.in);
     System.out.print("Enter coefficient a: ");
     double a = sc.nextDouble();
     System.out.print("Enter coefficient b: ");
     double b = sc.nextDouble();
     System.out.print("Enter coefficient c: ");
     double c = sc.nextDouble();
     double discriminant = b * b - 4 * a * c;
       if (discriminant < 0) {
          System.out.println("The equation has no real solutions.");
        \} else if (discriminant == 0) {
          double root = -b / (2 * a);
          System.out.println("The equation has one real solution: " + root);
        } else {
          double root1 = (-b + Math.sqrt(discriminant)) / (2 * a);
          double root2 = (-b - Math.sqrt(discriminant)) / (2 * a);
          System.out.println("The equation has two real solutions:");
          System.out.println("Root 1: " + root1);
          System.out.println("Root 2: " + root2);
  }
```

144	Quadratic Equation
	1) Develop a java program that prints all real solution
	to the quadratic equation ax' + bx + c = 0. Read
	in a.b, c and use the quadratic formula Ef The discriminate b- Yac is negative, display a message stating that there is no real solutions
	the discriminate b- yac is negative, display a
	message stating that there is no real solutions
	import java util: Scannor;
	public class Main &
	public static void Main (Strings [] arigs)?
	Scanner scan = new Scanner (Syetem, in);
	System. Out. grintler ("enter the first us=");
	double a = scan next Double ();
	System. out. println ("enter the second no");
	double b = scan. noxtDouble ();
	System out println (" enter the third no: ");
	double c = sean nextDouble ();
	double disconiminant = (b*b)-(4*a*c);
	if (discriminant >0) {
	double root 1 = (- b+ Math, sqr + (discriminant))/
	(2*a);
	double root2 = C-b - Math. cgrt (discriminant))
	(1 *a);
	System.out. println ("The roots are exped="+ yout1+","+ voot2).
	else if (discriminant ==0) {
	double root 1= (-6)/12 *a);
	double root 2 = (-b)/(2*a);
	System. out. println ("The rook are equal="+
	Youtl+"," + Yout 2;
	?

oto else { System. out. println ("two to discriminate is negative");
System. out. println ("no rooks"); Owport will have and all sides enter the first no = 2 enter the second no = 5 enter the third no = 2 the rook are = -0.5, -2.0 enter the first no = 11 enter the second no = 1. enter the Kird no = 22

Output:

Enter coefficient a: 1 Enter coefficient b: 2 Enter coefficient c: 1

The equation has one real solution: -1.0

Enter coefficient a: 2 Enter coefficient b: 5 Enter coefficient c: 3

The equation has two real solutions:

Root 1: -1.0 Root 2: -1.5

```
PROGRAM 2:
import java.io.*;
import java.util.Scanner;
public class student{
   Scanner sc=new Scanner(System.in);
   String usn;
   String name;
   int [] credit;
   int [] marks;
   public student(int numsubjects){
   credit=new int[numsubjects];
   marks=new int[numsubjects];
   }
   void accept(){
           System.out.println("enter usn=");
           usn=sc.nextLine();
           System.out.println("enter name=");
           name=sc.nextLine();
           for(int i=0;i<credit.length();i++){
                   System.out.printf("enter credit of subject%d=",i);
                   credit[i]=sc.nextLine();
           for(int j=0;j<marks.length();j++){
                   System.out.printf("enter marks of subject%d=",i);
                   marks[i]=sc.nextLine();
   void display(){
           System.out.println("usn="+usn);
           System.out.println("name="+name);
           for(int i=0;i<credit.length();i++){
                   System.out.printf("credit of subject%d=%d",i,credit[i]);
           for(int j=0;j<marks.length();j++){</pre>
                   System.out.printf("marks of subject%d=",i,marks[j]);
           }
   void calc(){
           int totalcredit=0;
           int wmarks;
           for(int i=0;i<credit.length();i++){</pre>
                   int mmars=(\text{marks}[i]/10)+1;
                   totalcredit=totalcredit+credit[i];
                   wmarks=wmarks+mmarks*credit[i];
           if(totalcredit==0){
                  return 0;
           System.out.println("gpa="+(wmarks/totalcredit));
   public static void main(String[] args){
```

```
int numsubjects=sc.nextInt();
    student s1=new student(numsubjects);
    s1.accept();
    s1.display();
    s1.calc();
}
```

n/11/27	Page C
	Lab Program - 2
Ling	Levelop a ince
	an array marks. Include mettend to and
	an array marks. Include method to accept and
	display details and a meteral to calculate SCOPA
	of stuarns
	import java util Scanner;
	class Student &
	String warrant usn;
	String name;
	int[I credits;
	int[] marke;
	student (int numsubjects) {
	credits = new int [numsubjects];
- 1	marks = new int[numsubjects];
	3
	poid accept detaits () {
	Scanner sc = new Scannier (System. in);
	System. out. print ("Enter USN:");
	usn = sc nextline ();
	System out print ("Enter name:");
	name = sc. nextline ();
	for (int i=0; i < credits, length; i+1)?
	System. Out. print ("Enter credits for subject"
	+(i+1)+":");
	credits[i] - se: next Inf();
	System out print ("Futer marks for subject"
	+ (i+1) +":");
	marks[i] = se. nextline();
	2
	2

world displaydebails () ? Syckm. act. println("In Student Details:"). System. out. println("USN: " + usn); aysten. out grintly ("Namo:" + name?", System out printer (" Subjects, towards crodits, market) for lint is 0; i < credits length; i+ +) {

System. out printer ("Subject" + (i+1) + ": Credits." + credits (i) + ", Marks = " + marks in double calculate (CAPA () } double total (sedite = 0; double weighted Marks = 0; For for (inti-o; i & credits length; i++) { Int doubte adjusted Marks = [marks [i] /10] +1; weighted Marks + = adjusted Marks * credit [i]; total (redik + = credik [i]; if (to full red its = = 0) { return 0; return weighted Marke / total redik; public class Main & public static void main (string [) args [scanner se = new Scanner (System in); int numerablects - se norther (); Student student = new Student (num subjects);

	THE THE PARTY OF T
	NI SOUS
	O Date
	Date Page
	Student, accoptdatails ();
-	stratent deplaydetails ();
	apa = student coloulaticana ()
a t	pom. our. prinalin (Inscapa: + capa).
kst),	
	to 3 hadden or since a grant while
15.0	and will be think to be added the same of the best of
(17)	Output
9	Enter the number of subjects: 35
143	Enter USN: 1BM21 CSOS6
	Enter name: Utk
	Enter credit for subject 1:4
	Enter marks for subject 1: 93
	Enter credit for subject 2: 4.
	Culvial D
1	111 1 subject 3
il;	Clebiant 5
	Enter marks for subject 4: 3
	Enter credits for subject 4: 3
	enter marks for subject 4: 72
	enter viedils for subject 5: 81
	marks for subject
	SGPA: 9-2600
	Alaha 3 / 2 marks and sala
	The state of the s

OUTPUT:

Enter the number of subjects: 3 Enter USN: 1BM21CS056

Enter Name: UTK

Enter credit of subject 1: 4
Enter credit of subject 2: 3
Enter credit of subject 3: 2
Enter marks of subject 1: 85
Enter marks of subject 2: 90
Enter marks of subject 3: 75

USN: 1BM21CS056

Name: UTK

Credit of subject 1: 4

Credit of subject 2: 3

Credit of subject 3: 2

Marks of subject 1: 85

Marks of subject 2: 90

Marks of subject 3: 75

GPA: 8.44

```
PROGRAM 3
import java.util.Scanner;
class Book {
  private String name;
  private String author;
  private double price;
  private int numPages;
  public Book(String name, String author, double price, int numPages) {
     this.name = name;
    this.author = author;
    this.price = price;
    this.numPages = numPages;
  }
  public String getName() {
    return name;
  public void setName(String name) {
    this.name = name;
  public String getAuthor() {
    return author;
  public void setAuthor(String author) {
    this.author = author;
  }
  public double getPrice() {
    return price;
  public void setPrice(double price) {
    this.price = price;
  public int getNumPages() {
    return numPages;
  }
  public void setNumPages(int numPages) {
    this.numPages = numPages;
  @Override
  public String toString() {
    return "Book Name: " + name + "\n" +
```

```
"Author: " + author + "\setminusn" +
         "Price: $" + price + "\n" +
         "Number of Pages: " + numPages;
}
public class BookManager {
  public static void main(String[] args) {
     Scanner sc = new Scanner(System.in);
     System.out.print("Enter the number of books: ");
     int n = sc.nextInt();
     sc.nextLine();
     Book[] books = new Book[n];
     for (int i = 0; i < n; i++) {
       System.out.println("Enter details for Book " + (i + 1) + ":");
       System.out.print("Enter book name: ");
       String name = sc.nextLine();
       System.out.print("Enter author name: ");
       String author = sc.nextLine();
       System.out.print("Enter price: ");
       double price = sc.nextDouble();
       System.out.print("Enter number of pages: ");
       int numPages = sc.nextInt();
       sc.nextLine();
       books[i] = new Book(name, author, price, numPages);
     System.out.println("\nDetails of all books:");
     for (int i = 0; i < n; i++) {
       System.out.println("\nBook " + (i + 1) + ":");
       System.out.println(books[i].toString());
```

26/11/201		-
N/S	Lab-program-3	- 1
	Create a class Book which contains four members.	
	grame, author, price, num pages. Include a comple	-(-1
	etor to set the values for the members. Include	
	methods to do set and get the details of the	ot world
	objects. Include a holding () method that	
	could display the complete details of the book	2.48
	Develop a java program to create it book objects	-1 (3
	import java util Scanner;	
	public class Brok &	
	private String name;	
	private String author;	
	private int price;	
	private int num pages;	
	1/Conskruckor	
	public Book (String name, String author,	
	int price, int numpages) ?	
	Kis name = name;	
3	this author = author;	
	Ris. price = price;	
	this numpages numpages	
	public String getName () { return name;	
	refurn name;	-
	3	-
	public void set Name (String Name) {	
	Ris name = name;	
	3	
	public String netAuter ()?	
	public String getAuthor () ? Teturn author;	
	2 Tehurn author;	1
	5	1
		4

quiblic void setAuthor (String Author) { this author = author; public int gettrice () ? return price; public void setPrice (int Price) { 2 this price - price public int getNum pages () ?

Yeturn num pages; public void seton setnum pages () ? this num pages = num pages; public string tostring () { return "Name" + name + "In Author" + Author +" In Price: "+ grice + " In Num pages: " + Numpages i public cats class Prok Store ? Scanner SC = new Scanner (System . in); System. out. printles ("Enter the noof book:"); int n = sc, next Ent (). Book[] books = new Brok[n]; for (inti=0; ixn; i++){ System.out. println l'Euter the name of Book: name = sc. nextline (); Sychem out printler (" Enter the name of Author") author = sc. nortline ();

-Syckem. out. println (" Enter the price: "); price = cc - nortInt(), System. out. println (" Enter the no of pages:"). book [i] = new Book (name, author, price, numpage for (int i= 0; i< n; i++)? System. out. printen (bookst i). to string ()); Output: Enter the number of Books= 1 Enter the detail of Book 1: Enter the name of Book: Java Enter the name of author: abc Enter the price of book: 200 Futer the number of pages: 500 Same of pook: Java Name of author: abe Price of book = 200

OUTPUT:

Enter the number of books: 2 Enter details for Book 1:

Enter book name: Java Programming

Enter author name: John Doe

Enter price: 49.99

Enter number of pages: 350 Enter details for Book 2:

Enter book name: Data Structures Enter author name: Jane Smith

Enter price: 39.50

Enter number of pages: 420

Details of all books:

Book 1:

Book Name: Java Programming

Author: John Doe Price: \$49.99

Number of Pages: 350

Book 2:

Book Name: Data Structures

Author: Jane Smith

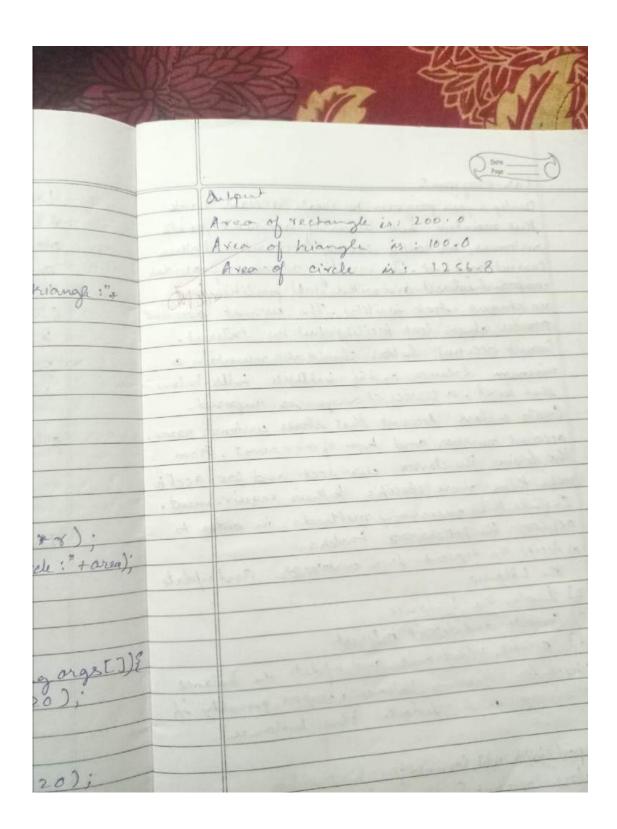
Price: \$39.5

Number of Pages: 420

```
PROGRAM 4
import java.util.Scanner;
abstract class Shape {
  int l,b,r;
  abstract void printArea();
}
class Rectangle extends Shape {
  Rectangle(int length, int breadth) {
     this.l = length;
     this.b = breadth;
  }
  void printArea() {
     System.out.println("Area of Rectangle: " + 1* b);
  }
}
class Triangle extends Shape {
  Triangle(int base, int height) {
     this.l = base;
     this.b = height;
  void printArea() {
     System.out.println("Area of Triangle: " + (0.5 * 1 * b));
  }
class Circle extends Shape {
  Circle(int radius) {
     this.r = radius;
  void printArea() {
     System.out.println("Area of Circle: " + (Math.PI * 1 * 1));
  }
}
public class area{
  public static void main(String[] args) {
    Rectangle r1=new Rectangle(10,20);
    r1.printArea();
    Triangle t1=new Triangle(10,20);
    t1.printArea();
    Circle c1=new Circle(20);
   c1.printArea();
  }
}
```

	Dote Page
	Lab-program u
	1 Darelon :
");	class named chape that contains to a
	and an empty molared search to integers
umpage);	Kuree classes name Rechard T. Round
1 0 4	Civele such that each one of the Triangle and
());	
	THE PROPERTY OF THE PARTY OF TH
	area of the given shape
	public abstract class Shape &
	Bull's lake I and I I
	public abstract printArea ();
	Z double l, b, & r;
	2
	class Rochangle extends Shape ?
	double l'
	double b;
	public Rectangle (double l, double b) ?
	# His. 1 = 9;
A STATE OF THE STA	Mis , b 2 , b ;
	3
17/2 11/2	public void printArea () {
	double area = 1 th b
	System out println ("The area of Kechangh: +
	area);
	3
	2
-	5 moleude Strape &
	class Triangle entends Strape &
	13.43.34
	double b;
	double b; public triangle (double l, double b) { This, l = l;
	! Ihis, I = X;

Much = b: Piblic wild printhrea (If double area = 0.5 * b * l; System out, println! The area of kinnage: area; Class circle extends shape ? Couble v; public circle! double v)? This. x = Y; 3 public void printhrea()? Abuble Area = 3:142 * (x * x): System.out.println! "Area of circle:" + area; 3 qubtic class Area ? public static void main (string args[]); shape vec = new Rectangle (10,20); vec , printArea(); Shape bri = new I rlangle (10,20); tri. print Area () Shape cir = new Circle (20); cr. printArea(); 3				
giblic void printhrea (IF double area = 0.5 * b × l; System out, println ("The area of hiang;" area); class circle extends shape if double v; public circle (double v) f Whis. x = Y; Julic void printhrea () f double area = 3.442 * (x + x); System out println ("Area of circle:" + area); 3 qubic class Area if public shape vic = new Rectangle (10, 20); rec, printhrea (); shape bri = new I riangle (10, 20); tri, print Area () Chape cir = new Crete (20); cir, printhrea(); 3			Man b = b;	
public wold printfree (35 by 6 c) double area = 0.5 * by 6; System out, printful "The area of himned;", drea); class circle extends shape of double r; public circle! double r) of Khis. r = r; 3 public vould printfree (35 double area = 3.142 * (7 + x); System.out.printful "Area of circle: "tarea); 3 qubic class Area of public static void main (string argst); shape ric: new Rectangle (10, 20); rec: printfree (); shape hi = new I rlangle (10, 20); kai. print Area () Shape cir = new Circle (20); cir. printfree(); 3	X		2 and the second and the second secon	1
System out, println ("The area of humang " or area"); System out, println ("The area of humang " or area"); Clars circle extends shape { double "; public circle (double ") } Miss. " = " ; 3 public void println veral) { double area = 3.142 * (" + "); System out, println ("Area of circle:" + area); 3 public clars Area { public shape vic = new Rectangle (10,20); "rec , println val); Shape hi = new [rlangle (10,20); his print Area (); Shape cir = new Circle (20); cir. println veal); 3 3			The world properties ()?	
System out, println ("The area of himag:" area"; class circle extends shape of double "; public circle (double ") of Miss x = "Y; 3 public voibl println Avea of of yeth:" + area; 3 qublic class Area of public static void main (khring args []); shape rec = new Rectangle (10, 20); rec, println Area (); shape hi = new [riangle (10, 20); kw. print Area () shape cir = new Circle (20); or of println Area (); shape cir = new Circle (20);			touble area = 0,5 * b * 1;	
class circle extends shape i double r; public circle (double r)? This, r=r; 3 public voibl printAreal)? Abuble Area = 3:142 * (x * x); System.out.println! "Area of circle:" + area); 3 qubdic class Area i public static void main (string args[]); shape rec = new Rectangle (10,20); rec , printArea (); Shape bu = new I rlangle (10,20); tw. print Area () Shape cir = new Creb (20); cir. printArea(); 3			System. out println (" The area of krianas :"	
class circle extends shape i double v; public circle (double v)? Mis. v = v; 3 public voibl pilntAreal)? divible dran = 3.142 * (x + v); System.out.printle ("Area of circle:" + area); 3 qublic class Area i public static void main (string args[]): shape vec = new Rectangle (10,20); vec , printArea (); shape bri = new [rlangle (10,20); tru. print Area () Shape cir = new (vet (20); cir. printArea(); 3	1		area)	- CM3
double v; public Circle (double v) f Rais, v = v; 3 public void printAvea () f double Area = 3.142 * (v + v); System.out.printle ("Area of circle:" + area); 3 public class Area f public static void main (string args[]) { shape vec = new Rectangle (10, 20); vec . printAvea (); shape bri = new [vlangle (10, 20); ka, print Area () shape cir = new Circle (20); crr. printAvea (); 3			3	144 1954
double v; public Circle (double v) f Rhis, v = v; 3 public voibl pilmt Avea () f double Area = 3.142 * (v * v): System.out.printlent "Area of circle:" + area; 3 public class Area f public static void main (string args[]) { shape vec = new Rectangle (10, 20); vec .printArea (); shape hi = new [viangle (10, 20); ka, print Area () shape cir = new Circle (20); cir. printArea (); 3	-	The same	3 and the second of the second	- 10
double v; public Circle (double v) f Rhis, v = v; 3 public voibl pilmt Avea () f double Area = 3.142 * (v * v): System.out.printlent "Area of circle:" + area; 3 public class Area f public static void main (string args[]) { shape vec = new Rectangle (10, 20); vec .printArea (); shape hi = new [viangle (10, 20); ka, print Area () shape cir = new Circle (20); cir. printArea (); 3			class civele extends shape {	1 1
public Circle (double x) f Mis. 8 = Y; 3 public void printAvea() f double Area = 3.142 * (x * x). System.out.println ("Area of circle:" + area); 3 qublic clars Area f public static void main (string args[]) i shape rec = new Rectangle (10,20); rec. printArea(); Shape bri = new I rlangle (10, 20); ru, print Area () Shape cir = new Circle (20); cir.printArea(); 3				7-12-1
public voible printAreal)? public voible Area = 3.142 * (x * x). System.out.println! "Area of circle:" + area); qublic class Area f public static void main (string args[])? shape rec = new Rectangle (10,20); rec. printArea(); shape bri = new [riangle (10,20); tw. print Area() shape cir = new Circle (20); cir. printArea(); 3				
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System.out.println("Area of circle:"+area); 3 qublic class Area { public static void main (string args[]); shape rec: new Rectangle (10, 20); rec.printArea(); Shape bri = new Trlangle (10, 20); tri.print Area() Shape cir = new Circle (20); cir.printArea(); 3 3			3	-
System.out.println("Area of circle:"+area); 3 qublic class Area { public static void main (string args[]); shape rec: new Rectangle (10, 20); rec.printArea(); Shape bri = new Trlangle (10, 20); tri.print Area() Shape cir = new Circle (20); cir.printArea(); 3 3			Bullis would pade Mars 128	01 100 N
System.out.printin ("Area of circle:" + area); 3 qublic class Area { public static void main (string args[]); shape rec: new Rectangle (10,20); rec. printArea (); shape bri = new Trlangle (10,20); rw. print Area () shape cir = new Circle (20); cir.printArea (); 3 3				. /494
gublic class Area { public static void main (String orgs[]) { shape rec = new Rectangle (10, 20); rec , printArea (); Shape tri = new Triangle (10, 20); tw. print Area () Shape cir - new Circle (20); cir. printArea (); 3			Cultura bankin 1"A 1 = (3 * 8)	
shape rec = new Rectangle (10,20); rec. printArea (); Shape hi = new Triangle (10, 20); hw. print Area () Shape cir = new Circle (20); cir. printArea (); 3			3	1 1/1
shape rec = new Rectangle (10,20); rec. printArea (); Shape hi = new Triangle (10, 20); hw. print Area () Shape cir = new Circle (20); cir. printArea (); 3		3.5	3	O. Child
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Shape bui = new Trlangle (10, 20); Fri. print Area () Shape cir = new Circle (20); cir. printArea(); 3			rec. printarea ();	30 1
Shape cir = new Circle (20); cir. printAreal); 3				
Shape cir = new Circle (20); cir. printAreal); 3	2-	Mileson of the Control of the Contro	shape bui = new Trlangle (10, 20);	
3 civ. printAreal);			Kwi. print Area ()	
3 civ. printAreal);				
3 civ. printAreal);	1	-	shape cir = new Circle (20);	
3				
3 Company of the second state of the second st			3	
The state of the s			3	
		300	Large Co.	
		Series 1		7.9 3 9 3 5



OUTPUT:

Area of Rectangle: 200 Area of Triangle: 100.0 Area of Circle: 1256.63

```
PROGRAM 5
import java.util.Scanner;
class Account {
  String name;
  int accNo;
  double balance;
  public Account(String name, int accNo, double balance) {
    this.name = name;
    this.accNo = accNo;
    this.balance = balance;
  }
  public void deposit(double amount) {
    balance += amount;
    System.out.println("Deposit successful! Current balance = " + balance);
  public void display() {
    System.out.println("Current balance = " + balance);
}
class SavAccount extends Account {
  public SavAccount(String name, int accNo, double balance) {
    super(name, accNo, balance);
  }
  public void calculateInterest() {
    double rate = 0.05;
    double interest = rate * balance;
    balance += interest;
    System.out.println("Interest applied! Current balance = " + balance);
  }
  public void withdraw(double amount) {
    if (amount <= balance) {
       balance -= amount;
       System.out.println("Withdrawal successful! Current balance = " + balance);
       System.out.println("Insufficient balance.");
  }
class CurAccount extends Account {
  int minBalance = 1000;
  int penalty = 50;
  public CurAccount(String name, int accNo, double balance) {
```

```
super(name, accNo, balance);
  }
  public void withdraw(double amount) {
     if (balance - amount >= minBalance) {
       balance -= amount;
       System.out.println("Withdrawal successful! Current balance = " + balance);
     } else {
       balance -= penalty;
       System.out.println("Penalty applied! Current balance = " + balance);
}
public class Bank {
  public static void main(String[] args) {
     Scanner sc = new Scanner(System.in);
     SavAccount sav = new SavAccount("Abe", 203, 1000);
     CurAccount cur = new CurAccount("Abc", 204, 2000);
     int choice;
     while (true) {
       System.out.println("Press 1 for Savings Account, 2 for Current Account, 0 to Exit:");
       choice = sc.nextInt();
       if (choice == 1) {
          System.out.println("1 - Display Balance\n2 - Withdraw\n3 - Deposit\n4 - Calculate
Interest");
          int option = sc.nextInt();
          if (option == 1) {
            sav.display();
          \} else if (option == 2) {
            System.out.print("Enter amount to withdraw: ");
            double amount = sc.nextDouble();
            sav.withdraw(amount);
          \} else if (option == 3) {
            System.out.print("Enter amount to deposit: ");
            double amount = sc.nextDouble();
            sav.deposit(amount);
          } else if (option == 4) {
            sav.calculateInterest();
          } else {
            System.out.println("Invalid option.");
       \} else if (choice == 2) {
          System.out.println("1 - Display Balance\n2 - Withdraw\n3 - Deposit");
          int option = sc.nextInt();
          if (option == 1) {
            cur.display();
          \} else if (option == 2) {
```

```
System.out.print("Enter amount to withdraw: ");
    double amount = sc.nextDouble();
    cur.withdraw(amount);
} else if (option == 3) {
    System.out.print("Enter amount to deposit: ");
    double amount = sc.nextDouble();
    cur.deposit(amount);
} else {
    System.out.println("Invalid option.");
}
else if (choice == 0) {
    System.out.println("Exiting program.");
    break;
} else {
    System.out.println("Invalid choice.");
}
```

}

Develop a fava graggram to create a class bank

Peretop a fava graggram to create a class bank

Peret maintain two kinds of account for its

curtomers, one called saving account and other

current account. The sarring account provide

compound interest and withdrayal facilities but

no chaque book facility. The current account provides chaque back facility but no interest. Current account holders should also maintain a minimum balance and if ballence falls below this level, a cervice charage is imposed. Create a class Account that stores customer name account number and lype of account. From His derive the classes our-acct and sav-accts make them more specific to their requirement. Include the necessary methods in order to action the following tarks: a) Accept the deposit from custometr and update the balance b) Display the balance c) compute and doposit interest d) permit withdrawel and update the balance check for minimum balance , impose genalty is necessary and epidate the bolonce Import java util Scanner; class account & Etring name; int accup; double balance: public Assaccount (string name, int access, double balance

	Date Page
K	this name - name;
to	this aceno = aceno;
ses	this, balanco = balanco;
ides	Carried San Comment of the Comment o
	public void deposit (double amount)?
bunt	balance = balance + amount;
	System. out. printle ("Deposit successful
cu	current balance: "+ balance);
ew .	3 tunginiti - sentral
	public void display () {
ame,	Sy Hem. out. printer ("Current balance + "balance)
1	2 the standard at a grandful facilities
ctho	class source count savaret extends account ?
rt.	public sewarce (String Name, Intacons,
0	daube belance of &
· č	cuper (name, accno, balance);
ale	3
nne	- 10: word cal inter 1)?
	public void cal inter () ? dauble interest = 0.05;
	double interest = vali * balance;
	balance = balance + 1 wherest;
2	balance = sacretar touch applied
8	System.out.println ("Interest applied
	current balances "+ balance);
	3
The state of	public void withdraw (double amount)?
	I canaly to a barunce
- (0)	
- Instit	System. out. println (" withdrawl system.out. println (" withdrawl " current balance:"
	System out 1 Current balance:
of Amo	
	+ balance);
	else { Syskin.out.printer ("Insufficient balance"); 3
	" les out printer (" Insufficient balance";
	>year.
	3
A COLOR	2

public class our acet extraple account ? public curraced (strong name, but accome, double balance) ? super (name, accua, balance); int minbalance = 1000 i int genalty = 50; public void withdraw double amount)? if (amount > = missioners minbalance) ? balance -= amount; balance - = penalty System. out, printly (" Penalty applied current balance = " + balance). Dobe ? balance - a comount: System. out , printen ("withdrawl successful" arrent balance = "+ balance) 3 class Bank & quelie static void main (string [] args) { Seanner St = new Scanner (System . in); int x; int i= 0: chans savacet sav = new savacet ("Borroy Abe", 203, 1000); curracet ("Abe", 203,2000) while (i=0) 9 System.out.println ("Press 1 for saving account in 2 for current account); or = sc. noset Int ().

	Dute Page C
	if(x==1) {
man	Sout ("1-shalance; 2 -> w/Mdraw; 3-sdeposit;
	4 -> interest);
	X = sc. nextInt ();
	if (x = = 1) ?
	Sout (14 > batance; 2 > w/thdraw
3	Sc. display();
	3
	else if (x==2) {
red	Sout ("Extra amount:");
-ea	entry = Sc. next Int ();
	sc. withdraw (y);
	3
	else if (n==3) {
	Sout ("Enter amount=");
N.	The state of the s
	se deposit (inty);
	elu ij 1 == 4)-8
	sc.(al_inter();
	3
	else f
	break i
	de la
0.0	de activity and the second sec
Abe",	else if (x==2){
00);	else if (n = 2) { Sout ("1 -> balance; 2 -> willdraw, 3 -> deposit);
03,2000;	Sout ("1-3 balance; 2 dept
0),000	n=sc. next Int (),
count In	11/9==1){
com	se display ();
	1 11 (4000) }
	sout (" Enter the amount: ");
	Sout Conen
The state of the s	

	15.40.	
	inty = sc. nort Int ();	
1	ave. windraw (y);	
	che if (y= = 3) {	
	Sout l"Enter the amount: ");	
	int y = se nox12nd ();	
	aux. deposit (inty):	_
	3	loh l
	else E	
	break;	
R	3 - Marchan St. and ilina	
	Terror (a Draward Advance)	
	Output	
	Futer 1 -> Saving acc; 2 -> currentacc	
	Enter 1 -> balance; 2 -> deposit; 3 ->	
	willdraw, 4 & Enterest # 50 5 + out	
	current balance = 1000	
	2	
	Enter amount 200	
	Deposit successfull current balance = 1200.	
	3	100
	Enter amount	
	200	
18		
7	with draw successful; current balance= 1000	
		+
	Interest applied current balance = 1050	-
	And the second of the second o	-
- 41	Catality of the	
	The state of the s	
	and the legitle 12	
	THE CALL TO SERVICE OF THE PARTY OF THE PART	

```
OUTPUT:
Press 1 for Savings Account, 2 for Current Account, 0 to Exit:
1 - Display Balance
2 - Withdraw
3 - Deposit
4 - Calculate Interest
Current balance = 1000.0
Press 1 for Savings Account, 2 for Current Account, 0 to Exit:
1 - Display Balance
2 - Withdraw
3 - Deposit
4 - Calculate Interest
Enter amount to deposit: 500
Deposit successful! Current balance = 1500.0
Press 1 for Savings Account, 2 for Current Account, 0 to Exit:
1 - Display Balance
2 - Withdraw
3 - Deposit
4 - Calculate Interest
2
Enter amount to withdraw: 200
Withdrawal successful! Current balance = 1300.0
Press 1 for Savings Account, 2 for Current Account, 0 to Exit:
1 - Display Balance
2 - Withdraw
3 - Deposit
4 - Calculate Interest
Interest applied! Current balance = 1365.0
Press 1 for Savings Account, 2 for Current Account, 0 to Exit:
1 - Display Balance
2 - Withdraw
3 - Deposit
Current balance = 2000.0
Press 1 for Savings Account, 2 for Current Account, 0 to Exit:
1 - Display Balance
2 - Withdraw
3 - Deposit
Enter amount to withdraw: 1950
Penalty applied! Current balance = 1950.0
Press 1 for Savings Account, 2 for Current Account, 0 to Exit:
```

```
PROGRAM 6:
package CIE;
public class Student {
  public String USN;
  public String Name;
  public int Sem;
  public Student(String USN, String Name, int Sem) {
    this.USN = USN;
    this.Name = Name;
    this.Sem = Sem;
  }
  public void displayDetails() {
    System.out.println("USN: " + USN);
    System.out.println("Name: " + Name);
    System.out.println("Semester: " + Sem);
  }
}
package CIE;
import java.util.Scanner;
public class Internals extends Student {
  public int[] marks = new int[5];
  Scanner input = new Scanner(System.in);
  public Internals(String USN, String Name, int Sem) {
    super(USN, Name, Sem);
  }
  public void setMarks() {
     System.out.println("Enter the internal marks for 5 subjects:");
    for (int i = 0; i < 5; i++) {
       marks[i] = input.nextInt();
  }
  public void displayMarks() {
     System.out.print("Internal Marks: ");
    for (int mark : marks) {
       System.out.print(mark + " ");
    System.out.println();
  }
```

```
package SEE;
import CIE.Internals;
import java.util.Scanner;
public class External extends Internals {
  protected int[] externalMarks = new int[5];
  protected int[] finalMarks = new int[5];
  Scanner input = new Scanner(System.in);
  public External(String USN, String Name, int Sem) {
    super(USN, Name, Sem);
  }
  public void setMarksSEE() {
     System.out.println("Enter the external marks for 5 subjects:");
    for (int i = 0; i < 5; i++) {
       externalMarks[i] = input.nextInt();
  }
  public void calcFinalMarks() {
     System.out.println("Final Marks:");
    for (int i = 0; i < 5; i++) {
       finalMarks[i] = marks[i] + externalMarks[i];
       System.out.println("Subject " + (i + 1) + ": " + finalMarks[i]);
  }
import SEE.External;
import java.util.Scanner;
public class Main {
  public static void main(String[] args) {
    int n = 3;
    External[] students = new External[n];
     Scanner scanner = new Scanner(System.in);
    for (int i = 0; i < n; i++) {
       System.out.println("Enter details for student " + (i + 1) + ":");
       System.out.print("Name: ");
       String name = scanner.nextLine();
       System.out.print("USN: ");
       String usn = scanner.nextLine();
       System.out.print("Semester: ");
       int sem = scanner.nextInt();
```

```
students[i] = new External(usn, name, sem);

students[i].setMarks();
students[i].setMarksSEE();

scanner.nextLine(); // Clear the newline
}

System.out.println("\nStudent Details and Final Marks:");
for (External student : students) {
    student.displayDetails();
    student.displayMarks();
    student.calcFinalMarks();
}

scanner.close();
}
```

	A SAME AND
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	O bots - O
	Top brodian - c
	Create a package CIE which has two classes -
	Student and internals. The class personal has
	members like USN, name, sem. The days
	internals has an array that stores the
11/08	internal marks scored in five courses of the
	current comester of the student. Create another
	Package OZE SEE which has the class
	External which is a derived class of & Endent.
	This class has an array that Hoves he
	SEE marks scored in five courses of the
	current semester of the condent. Import the
tacc	his packages in a ple that accases me
	final marks of n students in all time courses
sout	A state of the same and the same in the same
	import java.util. *;
	Dark and Clair and and
	public class student ?
	public string USN;
01	public String Name;
N 12 2	public int Sem;
	public and theira Name, int Sem) &
1	Student (String USN, String Name, int Sem) &
1000	MALL USN = USIV
	His. Name = Name;
	Mis Sem = Sem;
0.3	2
1 1 1 1 1 1	2

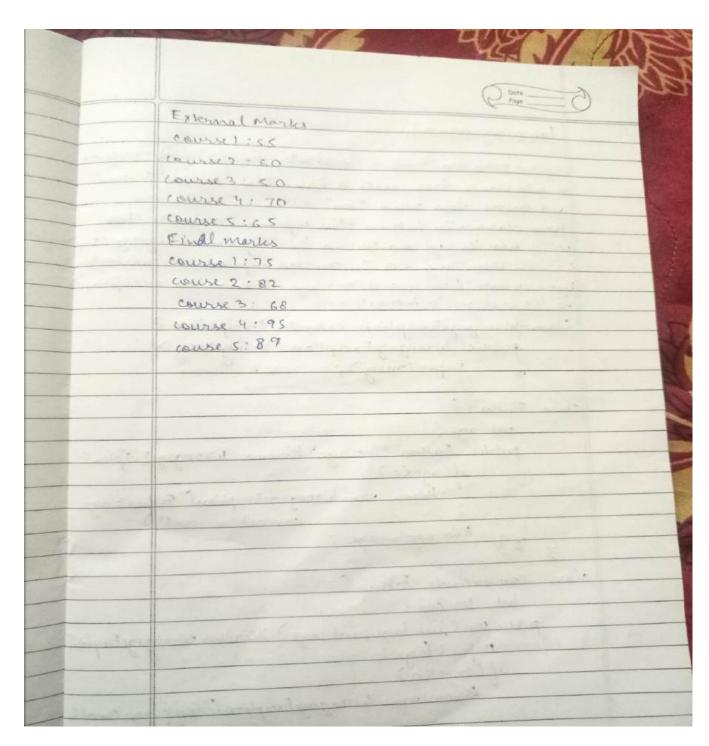
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parkage tos (IE; Public ches Internals exteads student & Scanner input = new Scanner (System in) 0. public inti Imarks = new int [5]; public void selmarks ()? for Ciutieo; ics; i++) ? System. out printer ("Enter the marks of subjet Howmarks [i] - input neset Into: import CIE. Internals; import jour util Scanner; public class External extends Internals & protected int [] external marks = New int[5]; protected intil tinel marks = new intis); Scanner input = new Scanner (System. in). public vott setmorks SEE() { System. out printer ("Enter the marks of soubjects torlint i=0; i<5; i++) { externalmarks [i] = input. next Ent (); public void calcfinalmarks () ? tor (int i=0; i<5; i+) { Findmarks [i] = Matter [i] + external Marks [iii System. out. printly (finalmarks [1]

	451/140
	Date A
	Import SEE externals;
	toug while Comment
	subtic class internals;
	gublic class Main &
_	Public static vaid main (String [Targs) ?
	int n=3;
subject	External [] students = new External [n];
	Scanner S = new Scanner (Sychm. in);
	tor(inti=0; i <n; i+)="" td="" {<=""></n;>
	Shidents [i] = new External();
	System out printen ("Name:");
	String name = S. nertline();
	System. out. println ("USN:");
	String USN= s.nextline();
	System. out. println ("Sem:");
	int marks = s. nextEnt();
	Students[i] o Student (USN, Name, Sem);
	Students[i] setMarks ();
	Students [i]. selmartessEE();
	Students [i] . calcfinalmarks ();
1").	-3
, /.	3 3 3 Manual Anabad
	the rue manuer of
	Enter the number of students: 1 Enter detail of student!
	Enter USN:
	18M2CCS008
7.	Enter Name:
	Amax
	E. too Semi
	thur serve

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P(0)01	Enter marks for course 1:
MIN	
000	Enter marks for course?
MO	22
V W	Enter marks for courses:
	Futer marks for course 4:
HITS -	25
WING.	Enter marks for course S:
MAR	24 - (3) - (3) - (4
NA :	Enter External marks for 5 courses!
M	Enter marks for course 1:
// /	SS - CT MARY CAMPAGE AND LOCAL CO.
	Enter marks for course 2:
A	60
	Enter marks for course 3:
	So So Later Manager Land
	Enter marks for course 4:
	96
	Enter marks for course s:
mind !	65
	Shident Details
500	
7/1/2	Semester: 5
The state of the s	Tuteral Marks:
	Course 1:20
	Course 2: 22
	course 3:18
	course 4: 25
	Alberta and the



Enter details for student 1:

Name: John

USN: 1CE21CS001

Semester: 5

Enter the internal marks for 5 subjects:

20 18 17 19 20

Enter the external marks for 5 subjects:

60 65 70 75 80

Enter details for student 2:

Name: Mary

USN: 1CE21CS002

Semester: 5

Enter the internal marks for 5 subjects:

19 18 20 18 19

Enter the external marks for 5 subjects:

55 60 65 70 75

Enter details for student 3:

Name: Alex

USN: 1CE21CS003

Semester: 5

Enter the internal marks for 5 subjects:

20 19 18 20 20

Enter the external marks for 5 subjects:

70 75 80 85 90

Student Details and Final Marks:

USN: 1CE21CS001

Name: John Semester: 5

Internal Marks: 20 18 17 19 20

Final Marks: Subject 1: 80 Subject 2: 83 Subject 3: 87 Subject 4: 94 Subject 5: 100

USN: 1CE21CS002

Name: Mary Semester: 5

Internal Marks: 19 18 20 18 19

Final Marks: Subject 1: 74 Subject 2: 78 Subject 3: 85 Subject 4: 88 Subject 5: 94

USN: 1CE21CS003

Name: Alex Semester: 5

Internal Marks: 20 19 18 20 20

Final Marks: Subject 1: 90 Subject 2: 94 Subject 3: 98 Subject 4: 105 Subject 5: 110

```
PROGRAM 7
import java.util.Scanner;
class wrongage extends Exception{
  public wrongage(String msg){
     super(msg);
  }
}
class father{
  int age;
  public father(int age)throws wrongage{
    if(age<0){
       throw new wrongage("age can not be negative");
    this.age=age;
class son extends father{
  int sage;
  public son(int fage,int sage) throws wrongage{
     super(fage);
    if(sage < 0){
       throw new wrongage("son age can not be negative");
    if(sage>=fage){
       throw new wrongage("son age can not be greater than father age");
    this.sage=sage;
  }
public class lab7{
  public static void main(String[] args){
     Scanner sc=new Scanner(System.in);
     System.out.print("enter father age=");
    int fage=sc.nextInt();
     System.out.print("enter son age=");
    int sage=sc.nextInt();
    try{
       son son=new son(fage,sage);
       System.out.print("the difference is");
       System.out.print(fage-sage);
    catch (Exception e){
       System.out.println(e.getMessage());
  }
```

7	[lab groungerram -]
	3
	1118 & program Kast demonstrates handling of exception 3
	which to less age and seven the exception exangages
	when the import ege to In son class implement a construction
-	that were both father is and son's age throws an exception
	if son asse is of feether's age.
4	Class wrongaget replien extends t-reeption?
_	qualic Wrongaget-xcoption (string msg)?
_	3 super (misg);
	class Father f
	intage;
	public Father (int age) Kirous Wrongage Exiption !
	if age (0)
	Huron new Wrongage Exuption ("Father's age 3 can not be -ve!") Ruis. age = age;
	g cannot be -ve!
	Rus. age = age;
	3 0
	class son extends Father ?
	int son Age;
	public son (int tage, int sage) throws wrongagetruples
0.00	super (fage);
	if (sage (0)
	throw new Wrongagetxeption ("Son's age canothe -ve");
	if (sonage > tatherage)
	Murow new Wrongage Exception ("Son's age cound
FIRST ST	Le de le la Clearie
	be greater than that of father's
	age);

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	Date Page
	Min sage = sage;
ing of exception	3 4
Word "Falliar"	
de Haller"	import java util *,
id i the	public class Main E
mulsulter	Public Habis world and it comes
www.angagets	Public Static Void main (String [] angel knows
t a constructor	FXCapped 3
an exception	Scanner Sc - new Scanner (System in)
	System out printer ("Enter talker's age");
on f	and tage = cc.nesetInt();
159 78	System out printer ("Enter son's age:");
	int sage = Sc next Int ();
	134 1
	sons = new son (fage, sage);
	System out Frinker ("The difference is:);
5 1 3 3 3 5	System out printen (tage - sage);
agage Exiption 9	3
00-4	Catala (a) rangaga of resolving a) §
" 10 1	System.out.println(e.getplessage());
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MT)	3
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	O/P: Enter father's ag: 15
	Enter son's age: 21.
	Enter Series
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00 1	Wrongage Exception: Son's age can't be greater than that
	of Jaker's age
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father's	
ALCOHOL: CO.	
OLITPLIT.	

enter father age=40 enter son age=20 the difference is 20

```
PROGRAM 8:
class mythread1 extends Thread{
  public void run(){
    try{
       while(true){
         System.out.println("Bmsce");
         Thread.sleep(10000);
    catch(Exception e){
       System.out.println("Thread 1 in interrupted");
  }
class mythread2 extends Thread{
  public void run(){
    try{
       while(true){
         System.out.println("CSE");
         Thread.sleep(2000);
    catch(Exception e){
       System.out.println("Thread 2 in interrupted");
  }
public class lab8{
  public static void main(String[] args){
    mythread1 t1=new mythread1();
    mythread2 t2=new mythread2();
    t1.start();
    t2.start();
  }
}
```

30	Laborscogran - 8
M	abops 697 Write a gregoran to create 2 threads, one thread displaying "BNC college of Engineering once displaying "BNC college of Engineering once
-	dieflaying BNC colleged traged "C S 18"
W.	every lost and
Mary Control	every two second.
	class Two Twood Togethor &
	Static class Trestands Thread &
	@ ourride
	public void run() {
	try &
	while (True) {
	System. out. printen ("BMSCE");
	Thread-Sleep (10008);
	3 and Small man and a second
-	2 3
	System. out. printer ("Thread (Interrupted")
	System out printer ("Thread (Intersupted")
	2 3
	S. P. Variation and Marketon American Street
	Static class To extends Thread ?
	@override
	public varid run () {
	try
	while (True) {
	System. out. printen ("CSIE");
- tening	Thread sleep (2000);
-	3
	Catch (Tator 1 15 1 20
	Catch (Interrupted Exceptione)?
	System out printer C"Thraad2 interrupted's
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thread		public etatic void main (String [Jargs] ?
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once		T2 b = new T2 ();
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CSE

CSE

Bmsce

```
PROGRAM 9:
import javax.swing.*;
import java.awt.event.*;
class Division implements ActionListener {
  static JLabel label1, label2, resultLabel;
  static JTextField textField1, textField2;
  public static void main(String[] args) {
    JFrame frame = new JFrame("Division of Numbers");
    frame.setDefaultCloseOperation(JFrame.EXIT_ON_CLOSE);
    frame.setSize(400, 200);
    label1 = new JLabel("Enter the first number: ");
    label2 = new JLabel("Enter the second number: ");
    resultLabel = new JLabel("Result will appear here.");
    textField1 = new JTextField(10);
    textField2 = new JTextField(10);
    JButton submit = new JButton("Submit");
    Division division = new Division();
    submit.addActionListener(division);
    JPanel panel = new JPanel();
    panel.add(label1);
    panel.add(textField1);
    panel.add(label2);
    panel.add(textField2);
    panel.add(submit);
    panel.add(resultLabel);
    frame.add(panel);
    frame.setVisible(true);
  }
  public void actionPerformed(ActionEvent e) {
    try {
       int num1 = Integer.parseInt(textField1.getText());
       int num2 = Integer.parseInt(textField2.getText());
       if (num2 == 0) {
         resultLabel.setText("Error: Division by zero!");
       } else {
         int result = num1 / num2;
         resultLabel.setText("The result of the division is: " + result);
     } catch (NumberFormatException ex) {
       resultLabel.setText("Error: Please enter valid numbers.");
```

Lab program, 9 import jaya, util. #; public glass Division ? public static void main (String [) arge) Scanner Sq = new Scanner (System in System out printer (1" Enter num!" enta: Write a program that creates a user enterface loperform integer divisions The user enters has numbers in the kest fields, num I and num?. The division of num I and num? is displayed in the result field when the divide button is clicked of num! or num? were not an integer. The program would throw a Number formal Exception of num? were zero, the program would throw an Arithmetic exception. Display the the exception in menage dialog box

impart javax swing *; impost java and event "; class division implements actionlyteness f Static Hable la; Statie Fortfield fitz; public static void main (string [Jargs) {

J Frame frame = new J Frame ("division of two

I rame set Default Close Operation numbers")); trame set Default close Operation (J Frame ENT) on close "); frame set Size (400, 400); Thatel 1: - new Habel ("enter the first number"); Thatel 12 - new Habel ("enter the second number"); 12 - new Habel (1111); JPanel p = new JPanel (); ti = new Trext Field (10); to = new FlexAField (10): Tatton submit = new I Button ("Submit"). Division to = new Division(); submit, add Action Licturer (te); p.add(li); P.add (t1); p. add (li) p. add (tz); P. add (13); P. add (cubmit); Frame add (p); trame, set Visible (true);

11		(A tion Frunts) ?	
		public void actionPerformed (Action Evente) ?. String S = e getAction(command ());	
		if (Os. equals ("Submit") }	
1		Bay 4	
		int num 2 = Integer . purse Int (to get level());	
20		int num 2 = Integer purse Int (tr. get Text()).	
		num! /= num2;	1
	-	String ans: "The answer of the division is" + num!	1
	(23. setText (ans);	1
	Treat !	3 produced and a prod	1
		catch (Exception +) 1	-
	F. 66	I Frame frame = new I Frame ("error occured),	
	No.	frame. setsize (300,100);	
	D. Carlo	Ilabel 1 = new Thabel (t. tolking ());	1
		Hame add (1);	
		Trame settinible (true);	
		3	
		3	
		3	
		010	
		Total Plane in I	
	1	Division of two numbers - 17x	
		enter the first number [12]	
13		enter the second number [3]	
		(Suprit)	
		The answer of the division is 4	
		The state of the s	
	-		
185	- 11		

ty division of two number - DIX enter the first number [12] enter the second number [0] Submit petTeset()); num 1 : error occured java lang. Arithmetic Exception/by zero; ccured"), Brogram

```
PROGRAM 10:
class SharedResource {
  synchronized void method1(SharedResource other) {
     System.out.println(Thread.currentThread().getName() + " is executing method1");
     try { Thread.sleep(100); } catch (InterruptedException e) {}
     System.out.println(Thread.currentThread().getName() + " is trying to call method2 on other
resource");
     other.method2(this);
  synchronized void method2(SharedResource other) {
     System.out.println(Thread.currentThread().getName() + " is executing method2");
     try { Thread.sleep(100); } catch (InterruptedException e) { }
     System.out.println(Thread.currentThread().getName() + " is trying to call method1 on other
resource");
     other.method1(this);
  }
}
class DeadlockDemo {
  public static void main(String[] args) {
     SharedResource res1 = new SharedResource();
     SharedResource res2 = new SharedResource();
     Thread t1 = \text{new Thread}(() -> \text{res1.method1}(\text{res2}), "Thread-1");
     Thread t2 = \text{new Thread}(() -> \text{res2.method1(res1)}, "Thread-2");
    t1.start();
     t2.start();
  }
}
```

~	(4)0
	Lab program -10
	class Shared Resource &
	and an ized unid metros
	Sychem out printer (Thread current Thread).
	Sychem. out. Println ("bolad authorithread). getName () +" is executing nethod!")?
	by & Thread elep(100); 3
4	cata (Interrupte d'Execution e) ? ?
	Sycken out printer (Thread current Thread () get Name ()+
M	"is trying to call method 2 oh other resource");
	Other method 2 (this);
	7
	synchronized void method 2 (shared Resource other) {
	Sycke out printle (Thread current Thread () - get Name () +
	" is executing method 2");
	dry & Thread, sleep (100); 3
1/1	Catch (Tutor noted Execution e) { }
	System out printen (Throad oursent Throad () get Name () +" is trying to call method (on other resource);
	to builting to tall method on other resource)
	other. method (this);
	2
	3
	class DeadlockDemo {
A	public static void main (String [] ongs) {
	Shared resource rest = new shared Resource);
	Thared Resource ves 2 = new Shared Resource ();
	Thread ti= new thread (C) - rest, melled (res),
	16 Thread-1");
41	Thread to = new thread (() -> res2, method (res)),
	"Thread?" 1;
	\$1, short();
	tr. stort ();

Thread-1 is executing method1
Thread-2 is executing method1
Thread-1 is trying to call method2 on other resource
Thread-2 is trying to call method2 on other resource