Parogeam -1 Class Overload & cemen Daniel void paint (int n) & mate int sum = 0; Itali I Ideals for (inti=1; i <=n; i++) { & career) : such + ? - such) proposo) System . cert. frintly ("Sum of" +n +" ratural numbers is" + sum); golden walnit g extende let p deland seo bios void faint (int in, inth) & . 3 ystem, out, printen (Porine number in the for (Inti=n; K=n;i++) { carge are "]; Jax (int j=2; i<=1/2; i++) & if(1x, 1=0) & Debt + " " 1 24- 3 4. of glag =1; to may? lerak ; Glast (flag ==0) in han situate sking System out printen (i); Class Overload Dans & Public static void nain (String [Jorgs]) { Oserland O = new Overload (); 0. print (5): o. print (7,13); 2HOC

Brogram-2 Casas Oranay & String C_ name; Storing C- ph; double total; Governy (String C , name, String C-ph) S this. C-name = C - name; this oc-ph = C-ph; void cale (double q-dal, double 9-hulses, double q- sugar)? total = 9 - dal * 100+ 9 - pulsos + s-gas * 100 void desplay ()?

System. Out. println ["Name" + "+ "Phone nember" + "" + "

Jotel"); System. out point In (Concorne +" "+ coph +" "+ total; System. out. print en (); Class Gr Done & Publicitatic void vane (String [Targs]?

Cracery 91 = new Creacy ("Rana", "2060307"); Gracery g1 = new Gracery ("Rana" PO60301); Gracery g2 = new Gracery ("Sharma", "76863"); Gracery g3 = new Gracery ("Brown", "9133371); 91. calc (2,2,2); g. display (); 92 · Cole (3,5,2); 32 · disflay ();

(o. : b) 31 960 Inhert josa util . Scanner;
coors quad & has another is menting to smooth double root i, root 2, d; Scanner S = new Scanner (System. in); Void injut () System out printly (" quadratic og sition is in the form = ax 2 + bx +(") System out Frentlin (Enter a: ");

a = S. nortInt (); System. out. print (" Enter b: ");

b = S. next Int (); System out, printer ("anter (:")" (= S. next Int() 3 moly reals) void discriment () &

d= (b*b)-(4+a+c); more) more void calculate Roots () & tayor. P if (d>o) merininget . p 9. relieble heate () 3 System. out printen(" Roots are seal and unequal"); root 1 = (-6+ math, -9 m (d?) f(2+a)); Groot 2 - (-bā Nath. sprt(d))/(2*a)), System. aid println("First poot is!" + root 1); System. out. printer ("Sevend roof 121"+ root 2);

de if (d = =0) System out paintly (" Roots are creal and squal "); System. out point en ("Post: "+ soot (); else System aut println ("No real solution . Roots are imaginary"); double real = - b/(200); double imaginary = Math . sqrt (-d)/(2+a); System, out brintly 1" The equation has two "Complex roots! + earl + "inogenery "+" i and" + roal + " - " + inaginary + " i"); alose Main & PSVM (String agold) & Grand q = New Grand (); 9. input (); 10 q · déscriminent () q. calculate Roots (); are 1 2 1 wotaged

import java, util. Scanner; class Books Storing rame; String author: Int price; Int Dum Pages; Books () 23 Books (Stringname, Storing author, int price, int Mun Pages) this. author-author; "(" rature als?") 9 0 % Deres 2 . evert () (this. price = price) (1 boar & - willies this. Dennforce = how numPages of the saw is sold Palistic string to string () Derthan C - uponous String name, author, heice, numbage, name = "Book name:" + their name + "(n"; author = "Author rane" + this author + "In" price = "Perice !" + this , price + " In" munlages = " number of pages ;" + this, numbages + " \n"; return name + author + price + name pogles;

Colass Main &

PSUM (String args[7) { Scanner S - new Scanner (System in); int n:

f-magazin Storing mane! Stoing author : intpice, rumlayer; S.O.P ("Enter the us. 9 books); n = S. next Int(); Books b []; b = new Books [n]; for (int i=0; kn; i++) Sop (Book " + (i+1)+":"). S.O.P ("Enter name g clook:"); hame: S. next (); 5.0.0 ("Enter author !"); aultion = S. nost (); 3.0. P (" Ender pie")! price = S. nort Int(); 3.0:1 (" Enter no glages"); numbage = 5. next int (); g = new Books (many, author, price, numlage) (Intrison; ising itt) 3.6. P ("Book" + (i+1) + " : \n" + b[i]); Lagonore, GA + 11. Copp celosus 19 - appendent i specifica toing i soll un a source mentione 3(1) (200 girl 8) 14029

Enter itere no. of brokes: 2 deter ouri trailing Book 1: Enter the number of book: Tungle Book Enter the author: Rudyard Penter the price 1000 Enter the humber of logo: Too Told Steech were Baok 2: enter the name of the book: Akber & Risbal Enter the author : Birbal Enter the price 2000 Enter the number of foges: Tooo Biokel: War with "I willing his with Book name: Tuengle - Book Author name 1 Rudgard Pare : 1000 1 Detring the metal Number of pages : 500 Book 21 Book rame: Atbas & Bierbal Author name Bierbelt and dollars states Peril : 2000 Number of pages: 5000 day lotst Delast by (double marke) haske

ideal Hanky to marker

Porogon -5 import java rotil Scanner: Elass Student
&
String USN; doubte (I marks - new double [6] void input details() Scanner Scanner = new Scanner Csyston in); System aut printly (" Enter USN" System. out printly ("Enter works of 6 sellejects");

Jor (int i=0; i < 6; i++) System . out. printer (* Subject" + (i+1)+":1));
marks [i] : Scarmer . rest double(); double calculate percentage () double total marks: 0;

Jor (double marks: narks) total Marky += narks; return (total narks (6);

void sisplay details () System out println (" Student Details"); System out printen (" USN: 11 + USN)! System, out println ("Name" + Name); System out printen!" Proscantage" + calculate Rescentage C) Lass ood

hublic Static void main (String [Joseps) class out Scorner scanner - new Scarner (System in) System out print I'Enter the reunter getudents") int number of Sudente = Scanners nort Int(1) Student [] student = new Student [number of students] for list 1=0: < number of students; i++) System. out paintlen(" Enter détails je student Student [i] = new Student ();

student [i] input Details ();

gr (Student istudent: situations) student dieflay details (); Versations Strait Benevilar 11. (PPP PPP PP)

Enter the number of students: 2 Enter details for student 1: enter the USN : 1BM 22CG285 Enter name: ABC Enter morks for & Subjects:
Subject 1: 78 soloject 2: 87 sulgest 3: 90 Sulgest 4:29 Subject 5:79 subject 6:80 Enter détails per student 2: Rater USN: 1BM22 (5240 Enter name: XYZ enter narks of subjects subject 1:550 sulged 2: 67 Julojed 3: 76 Sulzed 4: 80 subject 5:27 sulfit 6: 76 Student details: Student details USN= 1BM22 CS400 USN: 1.Boy 22C5285 Nane: XYZ Nune: ABC Perentag: 71.1666666666677 Parantage: 85.51/

Perageam-6 1) December Java program to create an alestrait class ramed shape that contains two integers and an empty meltind named fount Aseal Perwinds there classes named percentage triangle and and such that week one of the dasses extende the class shape each one of the classes contains the neltral porint area () that perinte the area of the given shape alestract class shape

? Int length;

int width;

Shape (int length, int width)

{ thus, length = langth;

thus, width - width;

} alostat wid print Areall; class spatangle extends shape and their reitangle (wint length, unt width);
Sufer (length, width); guoid print Acros () System out pointln(" Reclangearea: " + area); (DoorA tried 10)

class tricenge contends shape driangle (int longth, int width) Super (Dength, width) soid paint Area() System out println ("Joriangle area" + area); class circle oxtends shape Circle (int longth) Sufer (Dongth)); void print Areac) double area = Math PI* longth longth System out println ("circle area" + area close main public static wid main (String args []) r. print Arca();

Teriangle 1 = new Triangle (4,6); t. print Avreal); Circle C = New circle (3)'/
C. print Avreal) Rectangle area: 50 Out put: Friangle area: 12 Cir de area: 28:26 2) Revelop a java program to create a class Bouch that maintains these knids of account for its customers. one Called Savings amount and the older current account. The sairings account provide compound interest and withdrawal facilities bret no cheque book facility. the werent account provide cheque book faulty but no interest Cerrent account holders should also manitain a minimum balance and is elty balance palle below this lovel a securie barge is imposed. Create a class account that stores customer have account number and the dyfe of account from this derie the daspo current amount and sarrige accite make them more specific la their requirements. Include the necessary in ode to achieve plearing tasks: Accept deposit from customer and update the balance Display the balance son applies soft and reals Compute and deposit interest Pormit with drawal and update balance DOM5

class Account steing astoner Name; int account Number; String account type: double balance; Account (String enstances Name, intercount Number,
String account type, discusse balance) this a customer Name = Customer Name; this account Number: account Number; this account type: account light; tiad deposit (doelde amount) balance + = amount; System out pointle ("Deposit successful Updated balance" + Iralance); void display Balonie () System out println (" Rolance" + localance);

System out println (" Bolance" + bolance); class Sour Accostends Acc double interest late's DOM5

Saw Acet (Storing Customer Name, int account Number, double bolo well a delance) mesting. I was for the \$ worked not belles not british the "while" yells 3 uper (centomer Name, account Number, "Savings", Inlowe); this interest Rate = 0.05; exception was egel) was their agelo. In sa I see that and mile cate modern to your mily wis war Void deposit suterest () double interest = balance + interest Rote; doctare + = interest; System cert println (6° Interest deposited. Updated Islame + loclance) Void with draw (doubte amount) ij (Islance >= amount) I alane = = amount System, out pointle (" With drawal successful Updated balance; + balance); else (see see the spential by low seems Egstom out-println(" Insufficient funds for withdrawal."); 70H5

1) Write a program that demonstrates handling of corceptions of inheritance tree. Create a losse closes called "faltar" and derived class called "Son! which enlande der base dess. In falter lass, implement a constructor which takes the age and twowns the exception way age () when the input age 20. In son class implement a constructor that cases both father and son age and thereus an exception if sarge ap is >= fathers eye.

Osso father & public intage; father (intage) { if (age >013

throw now longer to grant to C"Age connot be negetive");

pastic class son ortends father { public int son age; pullic son (int Patherage int Son age) { Super (father age); warrang Age
brow new Istaget Asgament Troptin ("son's age cannot be >= fathers age");

Athie son age - Son age;

infant jara util Scannos; mullic class nain & public clase nain & public Static void main (String [Jargs) ? Scanner Scanner = new Scanner (System in); System out printen ("Enter father age:");
int father Age = Scanno Next Int (1;
System out printen ("Enter Son's age");
int SonAge = Scanner next Jul (1; Son son : new son (father Age, son Age);
System out println ("Fathers age;" + son age);
System out println ("Sons age:" + son son Age); Catch (Illegal Argument Exchtor e) & System out printer (" Exception" + e. get Mesage ()); Scarner Close); et par d'Expercetais Notes & Output: Enter fathers age: 20 Inter son's age: 4000 bier select sites Exception. son's one cannot be = father's age 52) should now & board, about : () trops of buch 10 hote . Sheet)

Worth a program which creates the threads sine thread displaying "Bris college of Engineering" once one oney I secondo class Threads extend thread? private String sent; private int intervalo; threads (string senters, intialouals) ? this sent = sent: this . intovals = intervals Julke void aun () & while closery & System out printage (sent). Thread , sleep (1000) I catch (interrupt 6 reption e) ? System out, println(e); class main & public states void arain (String (Targo) & Throads I wan Threads ("BMS idlege" 10); Meads thread 2 - new Threads ("(SE", 2)
thread 1. Start (); thread 2. Start (1) SHOC

Output: MMS collage CSE BMs willage CSE

Pachages:

package CIE; Import java- atil. Scanner; pulde class Student & protected String USN = new String (); parateded Storing name = new Storing () perdected int sem;

public void inputstudent Rotails ()

Scanner SC = new Scanner (System in) System out println(2 amp; quot; Enter student USN-Sc. Next(1', USN& ampiguoti);

System end printle (& amp ; and; Enter student rame 2 amp; quot;);

nount = sc. next ();

System out println(& amp; quot; Enter student Semestre & amp; quot i);

San = Sc. nord Int ();

pullic void displaystudent Retails (12

System out printen (Samp; quot; student us v: & amp ; quot; + usu); System out paintle (& amp; quot; swedend name; & amp; and; trans) System out, println (& amp; quot; student 2m; & amp; quot; + san)

package ett; import jara ulil Scanner public class internals extends not student ? protected int narks[] = new int [5]; pullic void input CIE marks U