

Lab PHOGHam - 6

Stydent, java package CIE; import java will. Scanner; public class Student & public String name; public String USM; public int sem; public void display () ? Scanney 3 = new Scanney (system.in); System. out. printly (" Name !-"); name = s. next (); System. Dut. print ("USN:-"); DSN = S. NOXTO; system. out. print ("semester:"); Sem= SeinextInt();

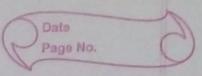
Jutemals. java

package CIE;

import java. util. Scanner;

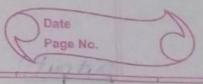
public class Internals extends students

public double ciem[];

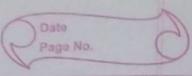


public void display () { ciem = new double [5]; Scanney t = new Scanney (System.in); System. out. printin ("CIE marks for 5 subjects:"); for (inti=0; i<5; i++) = ciem[i]=t.nextDouble (); Externals. java package SEE; imposet java. util. *; IMPORT CIEX; public class Externals externals CIE. Student & public dauble semm[] public void display () { semm = new double [5]; Scanner's = new Scanner (Systemin); System. out. printin ("SEE moules jon 5 & subjects (out of 100):"); for (inti=0', i<5', i+t) semm[i] = s. next Double(); Main . Java manual litu . our troop Import CIE. *;

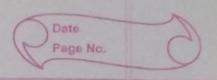
import SEE. *;



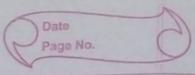
import java util . scanner; public class main & public static void main (String args [7) } in thi Scanney s = new Scanney (system.in); System. out print (" anter the number of students: "); n=S. next Int (); CIE. Student stl7 = new CIE. Student[n] CIE. Internals in[] = new CIE. Internals[n]; SEE. EXTERNAL ex[] = New SEE. EXTERNALS[N]; for (inti=0; i<n; i+t){ St[i] = hew CIE. Student (); in [i] - new CIE. Internals(); ex[i] = new SEE. Externals (); Stlil. display(); in [i] displayer; ex[i]. display(); System-out. println ("Total marks of student"+ stlil. name +" in 5 subjects are; "); for (int j=0; j <5; j++)} System.out. println (insi]. Ciem [i] + (efi]. semmlil



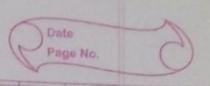
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	adput!
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-	USN: 16m 65 118
,	Semester, 9
	CIE Marks foor 5 subjects (out of 50):
(Citya)	145 The state of t
	47 MARTHANISTA
1000	1 + 39 0 910 MAN - F1 to the to 312
THE	49 1700 March (313
Tw7.44	44 - 19 - Che down tra 1932
	SEE marks jor 5 subjects (out of 160)!
	78
-	98 1000000000000000000000000000000000000
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	. 89 Milliogus Caani
	Total marks of student raman in 5 subjects
+ bucher	are; and the state of the metal
	84.0 2 4 4 2 1 1 1 4 2 AMCY. [] 42
	96.0 1/4/12/10=(buil rate
Whenes . I	82.57 mis. [17 di) withing humanty
4	95.5
	88.5



F MARRADRA dal write a program to demonstrate generics with multiple object parameters. 11 A simple Generic type with two type A parameters: Tandy class Two hen < T, V>g. Il Pass constructor a reference to and object I of type T and are object of type V. Two Gen (TO1, VO2) ? Ob1 = 01; " () Ldates 0 62 = 02; UShow types of Tand V. void showtypes () { System.out. printin(" Type of T is" + obt. get (less U. get Name ()); System. out. println ("Type of V is" + ob2. getclass(). get Name (1); 3 () Edotsp. T L'the arenter



V getob2 () § notuein obz; 1) Demonstrate Two Gen. class simplien & public static void main (String args [])? Twochen < Integer, string > tookin = new Two hen < 1 ntegen, String > (88) " (reverice"); 11 Show the Appels to a contraction of the tgrobj. show Types (); 11 Obtain and show values. int v = tgobj. getob10; System. out printly ("value: "+ v); String star = tgobj. getob2(); System. out. println (" value!" + Sta); output tugting Type of T is java, long, Integer Type of v is java lang string value: 88 Value : generics



Lab Program 8

exceptions in inheritance tree. Create a base class called Father and derived class called Son' which extends the base class. In father class, implement a constructor which takes the age and throws the exception whoughge I when the input age (I). In Son class, implement a constructor that dass cases both father and son's age and throws an exception if son's age is > = father's age.

class Whoughge extends Exception &

private String detail;

whoughge (Strings) &

detail = S;

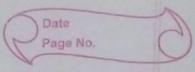
public String to String () ?

neturn ("Invalid age exception:" + detail

2 3

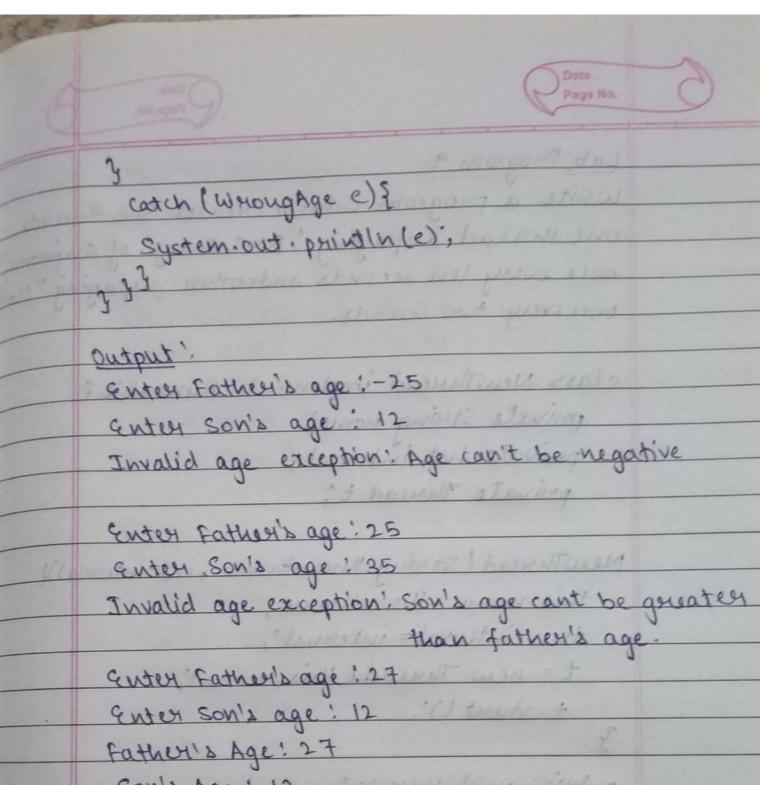
class jather ?

father lint on therois wrong Age ?

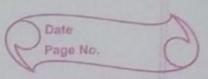


if (age < 0) throw new wrong Age ("Age can't be negative"); class son extends fathers intages; son (int tage, int sage) therows wrong Age & super (tage); ages = sage; if (ages>=age) therew new whong Age ("Son's age can't be greated than father's age"): class expmains public static void main (String angs[]) ? Scanner s = new Scanner (system.in); System. out. privat ("Enter Father's age"."); int m = s. next Int (); System.out. print (" enter son's age! ") int n = s next Int (); Frest son ob = new son(m, n);

System. out. paintly ("Father's Age; " + 06. age); system. out printly (" son's Age!" + ob . ags);



Son's Age: 12



Lab Program 9 write a program which creates two threads, one thread displaying "BMS college of anginoning" once every ten seconds and nother displaying "CSE" once every two seconds. class NewThread implements Runnable & private String name;

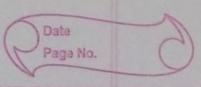
perivate int interval; private Thread t;

HewTheread (String thereadname, int interval) this name = threadrame; this interval = interval; t = new Thread (this, name);

public void sun () ?

for (inti=5', i>0', i--) }

System. out. privath ("Thread -- 4 + this name), Thread. sleep (this interval);



catch (Intersupted Exception e) } System.out. printly (name + "Interrupted"). class Multithousad ? public static void main (String augs []) {
new New Thread ("BMS college of Engineering", 10000); new New Thread ("CSE", 2000); ! tugtuo Thread -- BMS college of Engineering Thread -- CSE Thread -- CSE Thread -- CSE Thouad -- CSE Thread - - CSE Thread -- BMS college of Engineering Thread - - BMS college of Engineering Thread -- BMS college of Engineering Thread -- BMS college of Engineering