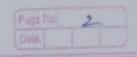
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Date.		

NAME : UDHAYARAJAN J. CLASS: NCA - I DATE : 07/10/0005 SUB : JAVA PROGRAMMING REGINO: 2202561 1 ( Unit I - Open BOOK ) Q1) write Java code for sum of digit ( use scarrer abec eg 1/P 1234 and 10). import dava util scanner; public class Sympthigil of arge) of.

public static void main (string ( I arge) of.

Scanner Sanner = new Canner (System in); System.out. Print ("Erobo a number"); int number = scarrer, next Int (); int sum = 0; int temp = numbon; while (temp! -0) & int digit = tomp 1.10; sum + = digit : temp / = 10. System out printh " sum of digit "+ number +" is "+ sum); Scanner Close(): 2. output: enter a number: 1234

Sum of digit of 1234 is: 10.



60). What is a class in java? Create class Employee and calculate salary of employee and display name and salary:

class:

In Java a class sorves as a blueprint or template for capating objects. It's a turda mordal concept in object oriented programming and define the structure and behaviour that object of that class will probes.

ex:

color and speed and methods like drive ()

(0)

Chris

import Jana util. Scannon: class Employee f. String name:

double basic Salary;

double. calculate Sabay () of return basic Sabay + bonus ;

8

void display Debils () of double Salary ();

double total Salary - Calculate Salary ();

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

System out println ("total salary"+ total salary);

4

public class Employee Main ( String [ 7 cogs) of Public Shtic void main ( String [ 7 cogs) of Sanner Sanner Sanner ( Systemin) :

Employee emp = rew Employee();

System out print ("Emp Name:");

emp hame = Scanner rext Line ();

System out print ("Emp Sabay:");

emp basic Sanny = Scanner next Double();

System out print ("Emp bonus");

emp bonus = Scanner rext Double ();

System out print ("In -- Dotails -- ...);

emp display Dotails ();

Scanner close ();

output

Emp day: 10000

Emp bonus: 5000.

Name : Udhayarajan J total Salary: 10500.

(3) What is Constructor? Write overload constructor code for. Item class.

Constructor:

that is automatically, when an object is created is is used to initialize the object is which is

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The construtor rane must be the same as the class Name. it does not have roturn type (not even vaid) It hun autopratically, who you coate an object using (new). you can have multiple constructor si sitt - soil restampes parathe this is called constructor overloading. 501. class Itom S int rem D; String item Name; double price; Home) f. // Defaut constructor item (D = 0; item Nane - "unknown" price = 0.0; Item (int 12, String name) & // provanctorized. Constructor item 10 - 10; (2 param). Itom whene = name; price = 0.0; Item (int 1), String name, double price) of Hom D = 12; / parametrovized Constructor. Hemshire = panse; (3 posam) prile = prile;

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Date.			

Void display () of system out println (" Nane" + item 10);

System out println ("Nane" + item name);

System out println ("price: + price);

public above Ham Main d.

Public states poid main (string ( ) ange) J

Item item? = new Item();
Item item? = new Item(101, "Note book");

Item Items - new Item (102, "pen", 10.5)

item : display(); item : display(); item 3 · display();

3

, J .

: tugtoro

(D:0

Name: Unknown

price: 0.0.

1D: 1D1

Name: Note book

prile : 0.0 .

10:102

Name: pon.

prile: 10.5.

Qu) Implement Multipevol inheritance to inherit teature.
of Animal, cut and dog?

multi level inheritance:

It mans a class dorived trom another dorived class torning a chain of inheritance.

Animal -> cot -> Dog.

- cat inhosits from Animal.

- Dog inhaits from cod.

- Thus, Dog indirectly inheait from Animal

sol:

class Animal f.

void est () 1.

Softstom out println ("Animal eats tood");

2

29

class Cat extends Animal of.

void neon() d.

system out println (" cod moon");

4.

8

class Dog entends Cat of

void book () of.

System out println ("Pog books");

3.

2

public class multilevelablesations of public static void main (String [] coage) of tog dog new tog();

dog. park();

dog. park();

4.

owtput:

Animal est food.

cat meon.

DOG books

QE). What is polymorphism? while Java code to calculate area of different shapes by using mother.

polymorphism:

object oriental programming copy that allow to objects to take on "many torms"

The form polymorphism is desired from Grant mords poly means many; morphs means forms.

- it allow one name to be used for

different behaviour.

or operator act differently depending on the object or data passed.

Types of polymorphism.

- compile time polymorphism (method overloading)
- Runtime polymorphism (method overeiding)

Method overloading:

class have the same name but different.

sociated by the compiler

method overriding:

specific implementation of a method absordy defined in its parent class.

Decided by the JVT at runtime

sol:

class shape of

double oaca (double side) of return side \* side;

8

double area (double length double width) of

double area (float padius) /
retruit 3.14159 & radius & radius;

8.

Page Not. 9
Public chase
Public class phymosphism Example )
static bold while string I I made !!
shape shape - her shape ();
System out printly ("Area of Squae: "+ Stage.
(F.O))
System. Out printly ("Area of rectargle:"+ stope. area
, , ,
Syptom out println ("Axea at aircle:" + shape area
(3.61));
,
9.
· Output:
Area of Square: Dr.O
Area of rectangle: 50.0
Area of cirde: 38. 4846975