31/07/25 - Assignment 3. Data types 10 class in 29/4 total de regist out sent -> class is can template / blueprint for creating an object stand expert state oritioning class keyword

-) class is declared using class keyword

-) Eq: class Main & 3

-) Inside class we can declare warrables, methods 2. global and local variables the got of I variables which declared jinside any methods is called local brariables, it canob be accessible only inside that methods methode is called global variables, it can be accessed any where we do called as fields There are study types of global variables 2. Wer- defined packages (sitatea(115ages) 2) nonstatic (Instance)

3. Data types transpies : selvolis There are two types of datastypes in java. They one primitive data types (fixed) is primitive data types boolean

To default we use int and double only

Non-primitives datation Non-primitives datatypes probable inviter esteriore who statises) Allo classes, tisting arrays loss of who 4. Packages soitable brokes de like folders used for organizing classes. The are two stypes of bodies only six to be the second of the seco packages.

1. Built-in packages Cpackages from java API)-C 2. User-defined packages (obn packages) ( smoteril) sitotered (2

- Due can create package using-package packnorme). 3 compile being javae ad . classname 5. object some sing java package names class name so de sobject es an Instance de an close, it has an both states and behaviour using now Kayword -) Syntax - classiname objectname = new classiname (); b. Constructor and constructor chaining

-) Constructor chaining private (

-) Constructor chave an Same name as class

harm hame brandsmith does not have any voturn type H is used for intializing object specific values

-) Every time one create an object an Constructor is called and it is default constructor

Jum has one default constructor

Constructor chaining is where one constructor

the help of this c) calls another constructor with the help of thisc) Keyword, thise) must be an first statement 2: 4

7. Inheritances genting prise questing stores no suice -) An objectional. one socials acts an object al another read classing is called inheritance more -) un can use entonds leguord en child class -) parent class is also called super class on base class I child class is raiso called subclass (or) derived class Je for code reusability we can use Inheritance of smarrens was amontopole smarrens motings & 8. Abstraction -) Showing only necessary data and hiding unwanted Information to withe water returned ( class Name

class Name

class Name

class , it will be created only in child class

class , it will be created only in child class

class , it will be created only in access modifier

class , it will be created only in access modifier () sint () abstract; methods cannot brave body and

H is to provided to by subclass some 21/00

H is to provided to by a subclass some (12/1/4) browned

q. polymor phism -spolymorphism means one Interface many forms . There are two types of polymorphism. They one 1. compile time polymorphism (method overlading) 2. run time polymorphism (method overriding) methods having same home with different number al arguments and different types a arguments ein same class is called method overloading mothods having same name with same number of arguments in different classes with parent and child relation is called method guerriding to be Encapsulation brought of it is because of the single sint a sint a -) It is an process of binding date and code together , to achieve this we can declare variables and attributes as private and use public setter and getter method to access and update the value of that variable (c)

TH increase the security of the data constructor rontorio

11. Interface Another way of eachieveing abstraction ) Interface es not a letasse it is an rules bothor bothon avendre and of smit sligares!

Intat accritemathoday are by adelant, abstract Implements makeyword used Instead of Extends Keyword, it sidoes not have object is down only main differente between 100% abstract class and Interface mis the does not have Constructor 12. this Super without belles de mitoler blins des

This is the Keyword and it refers to the

Current to bject into its a method

Current sto bject into its a method

Super is the sinkeyword and it refers to the parent so class objects and methods by solders.

13. this () vs superced to the day of constructor

This constructor

from another constructor

Superc) is used for calling the parent class constructor like this co, supercostalso be in 14. final Keyword can be weed in class, methods, -) If we use final keyword in class, they cannot Variables be inherited by other classes -) If we use in methods, it does not support -) If we use in variables, we cannot charge that value of the variables overriding 15. Static VS non Static -) static releas to class specific Information class Information is common for all -) Static Keyword is used for declaring Static -) Static variables can be accessed using class name and object name

-) non-static volvers to object specific Information

-) non estatic variable is not used Inside static

method, but we can use with help a object creation object is created everytime when an enew object is created object is created and good bond see see 2016s coldsirov Rocardo pol botivadai ad trogges too each ti, shooter ni see support general teames ou considerate in variables ou tet moite moder sitiones septo at sever situation of the sitote non ev sitote el the ret acommes si neitemotrit unit situte gainolook on bow is browned situte to British processed of the soldnirou