Note: all the programs in java are written inside a class Home so class Claus: -> It's a design pattern Home or blue point or template -> Members of class 1. Date Members Rooms -> Member funda. 2. Member Feenchions Ø → Date Member Data Member/variables -> It's a Storage/memory location to store the data -> Java is strictly typed programming lang i.e. we've to we expecific date type to the desired (2)=10; -> Types of date Non-primitive derived Default volue primitive Dulk wariable 1. boolean -> false (frue/falle) Ex: String, Arrays, 2. Char -> single space Boolean, Byte, Long (Magle Character) Character, Integer, 3. byte Float, etc. (1 byte) 4. Short (a byte!) 5. int-(4 bytes) C. long (E bytes) 7. Hood (A byteg) 8. double (& bytes) byte Ronge: (-128 to 127) 1 byte = 8 bits b2=128; CE MSB significant least Significant yet Sign bid O-) the 20-61 $\begin{pmatrix}
0 & 1 & 1 & 1 & 1 & 1 & 1 \\
1 & 1 & 1 & 1 & 1 & 1 & 1
\end{pmatrix}
\xrightarrow{>} 127$ $\begin{pmatrix}
1 & 1 & 1 & 1 & 1 & 1 & 1
\end{pmatrix}
\xrightarrow{>} -128$ > Types of variables. local Static non-static Glabal local: -> Declared inside the method -> can be used only inside the declared conethood. can't be used outside of the declared corethood. If trying to we outsite of the declared onethood then will get compilation error -> Mandatory to initialize the value reform Ets use else will get compilation error -> Declared inside the class but outside of the method -> Not orpendatory to Enitialize the value. If alsigning the value then the variable be considered with the given value else will be considered with the default -> We can use the global variables anywhen invide the declared class Constant type: Here in this case we can't update as anodify the variable's value pi -> 22/7 = 3.142 Declaration of variable: int a:

reference sange It can be anything Rules for reference manes! 1. It allows alpha numeric character we can we _ m & as well d. It rough not start with a number 3. We can't use the keywords as var. name Instialization of a variable Giving / assigning value to a variable int a; -> declaration a=5; -> Enitialization (or) Ent b=10; -> declared & initialized int x=15, y=20; -> Multiple declaration & Cookbant type declaration & initialization: fral float pc = 3.142; Keywords: Reserved words Member Functions/Methods: -> It's a block contains a piece of eady to perform the derived butinell logic operation -> Bather remalselity -> nos. of lines got reduced, so better time in execution -> Better maintainabelily -> Types: 1. Concrete: if method is having booth signature & body > Signature add() Ex: public void with any name 2. abstract if the conedthood is having only the signature but no body Ex: public abstract void add(), Types of class: 1. Concrete If class contains only concrete methodi Ext public class Main E public void add() 2. abstract: If class contains at least one abstract nethod Ex: abstract class Main ! public abstract void add (); public void add1() 97's a real-bone portity which has a state & behavior Syntax: Lclass name> (ref name) Sclass name) Dr'n a It can be 278 the keyword Constructor wed to Stores fore med to create a address of construct to new object the object newly created on every Envocation orgecl

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