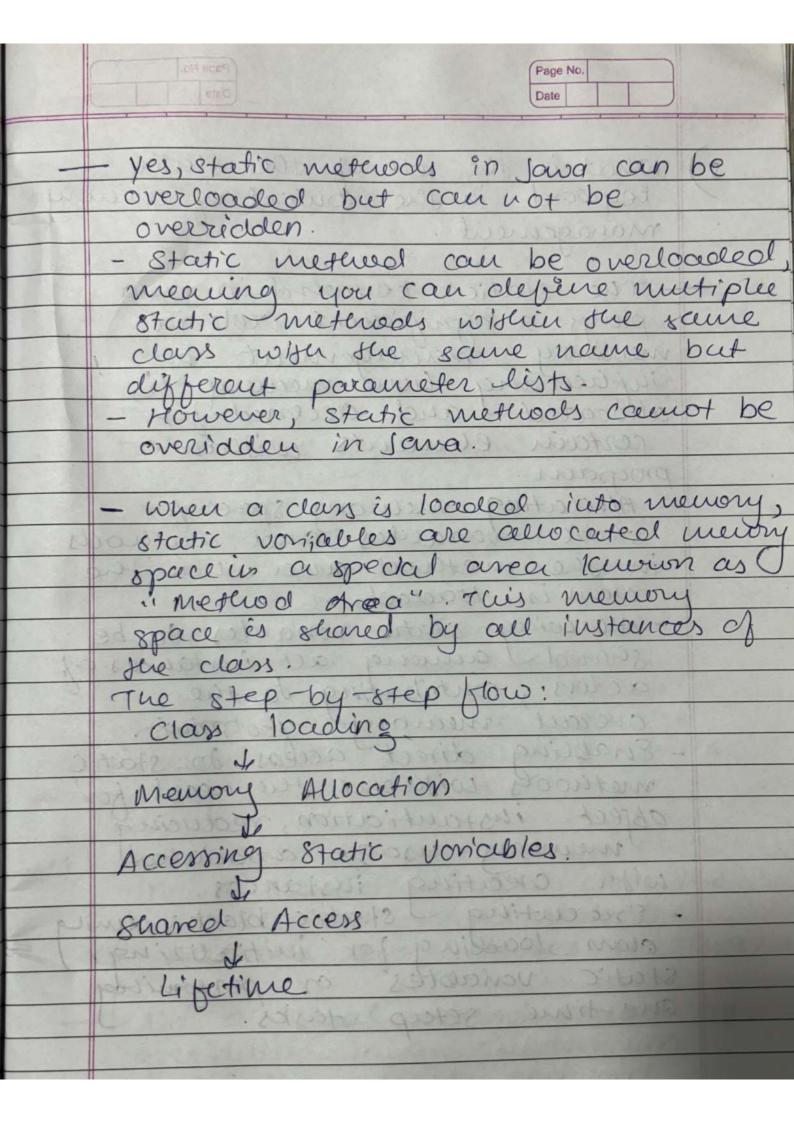
Page No. ASSIGNMENT 6 Date I) what is method overloading in Java & explain with an enample - Method overloading in Java is a feature short allows a class to have more their one metered having the same name, it their arguthert lists are different, for example void demo (int a) and double demo (double a). It's a way to increase the readability of the program. import java util. Scanner; void demo (int a) System.out.println("a:"+a); double demo (double a) system.out.println("a:"+a); return o*a; demo (10); demo(10,10); # Output: 000:10 a: 10.1

	Date	
DUE	In this example, we have two	
	methods named demo. The	
V D	fixt demo method takes an	
9930x	integer ous a perameter, while	
Pie	sur second demo mettied	
Total ba	takes a double.	
	when we call down (10), the	
	first method is invoked, and	
177306	when we call demo (10,10),	
	the second method is invoked.	
100	This is the essence of method	
	overloading in jourer.	
1		
2)	what are the rules for	
	method overloading toso which	
	in sava 9 How does java determin	
	which overloaded method to	
4	call 7 - 1 b 1 all the form the month of the	
	- The overloaded & overloading	
	methods must be in the same	
	class.	
	The method parameters must	
	- The method parameters must change: either the number	
	19pe of parcollington	
	THE TOOK	
	- The return tupe can be	
	MIEDIII MA - 1 TIVI I	
	The access modifier (
	modified bely	

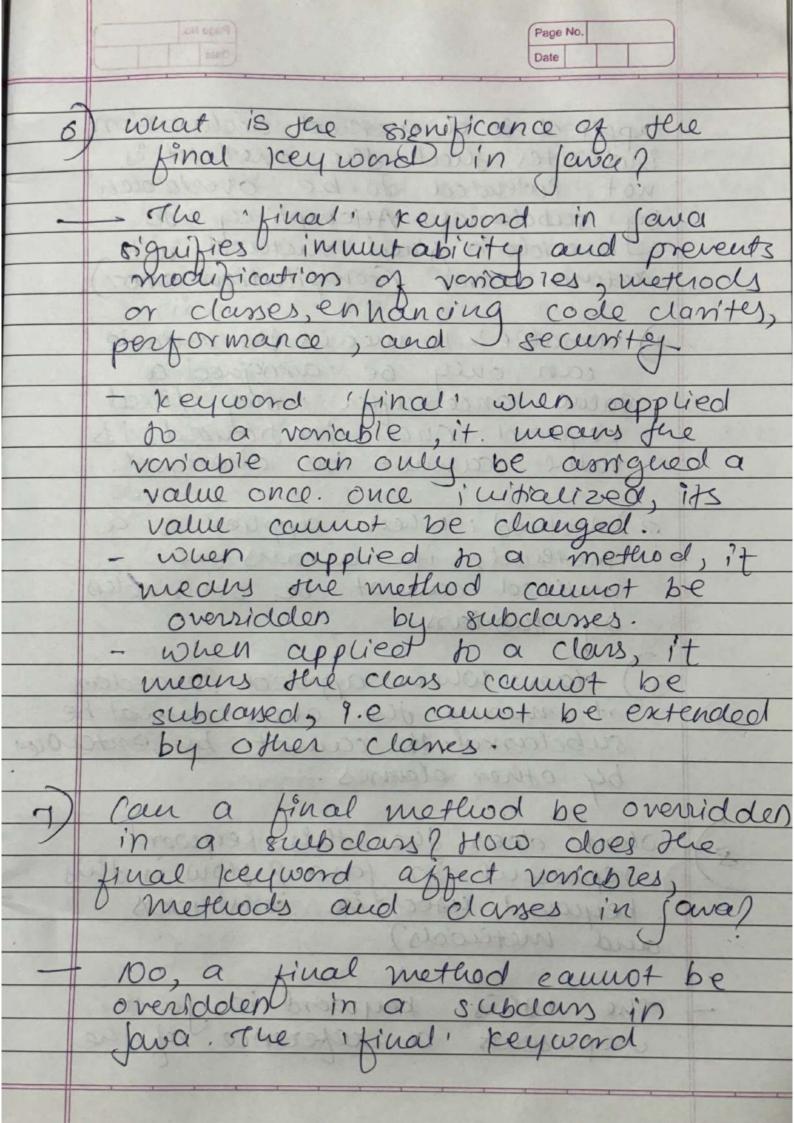
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Page No. Date - Throw exceptions , it any, can be freely modified. associated Java determines which overloaded method to call based on the arguments passed to see method during the invocation at compile true by matching the method organiture, with the organists provided. It selects the most spécific applicable version of the overloaded method based on the types of the arguments. If no enact match is found, it tries to find the closest compatible match, otherwise we secure error. what does the static keyword mean in Javo o Explain the difference between static & non static methody - The static keyword in Java is used to declare a member front belongs to the class itself, rather from to instances of the class. member is shared among all instances of the class. muchiple instances of a class

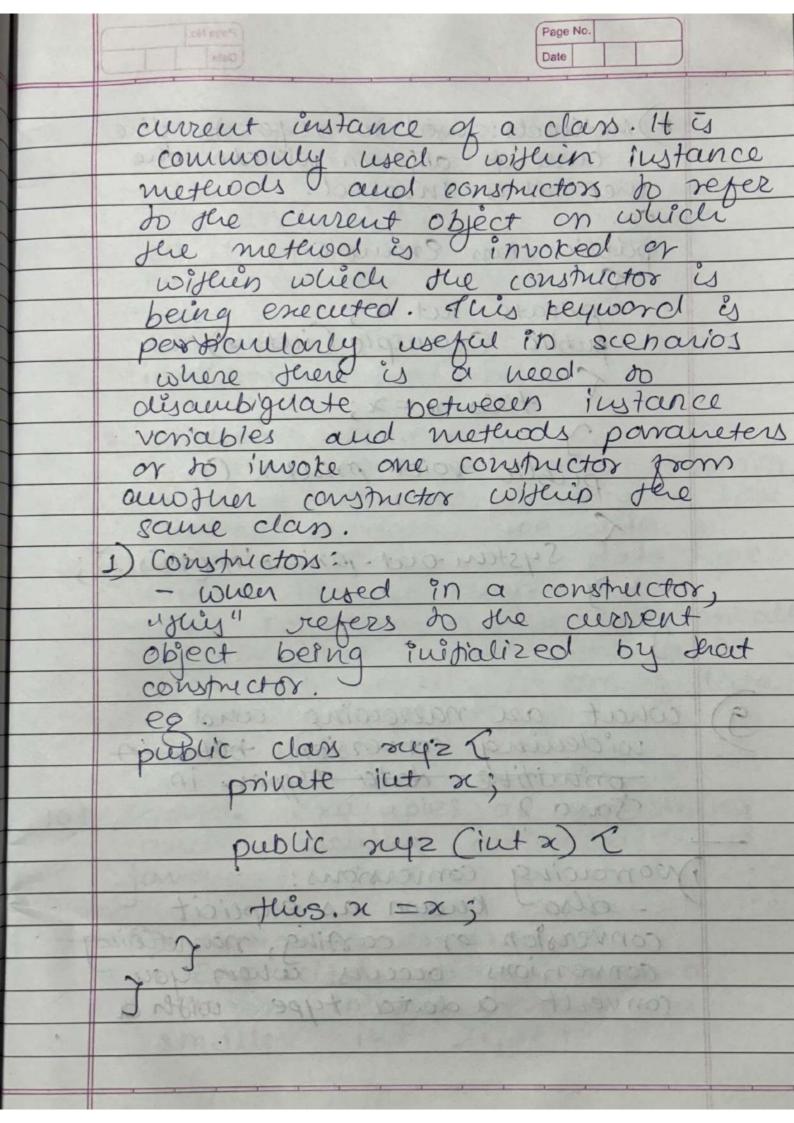
	Fegu No.	Page No. Date
	Static	Non-static
9d	CHICAL SHE CHOOSE, ORCH	SS SIGN GISTER TO THE
	Static methods are	non-static methods
	associated with the	one associated
روا		with instances of the
	localed into memory	class and one loaded
100x	when the dans is	into memony when
91	loaded.	an obj of class is
10	iciticities the survivio	created.
-	- Static methods can	- Non static methods
124	be invoked directly	are invoked on
2	using the class name,	instances of class,
Dap 1	witerbest the need to	instances of class,
	create au instance of	to create an object
0.7	the class.	class to call these.
	Production of the second	do say this
9-17-	they can only direct	, non-static methody
	access other station	can only directly
	members of class.	access Book menton
20.0	months of subcraining	
STLENG		
See 3	MANAGE IN 10 MOUT 1993	& other non-tatic
1000	TOURS OF CHICKENSE	methods.
3312		to the second
~		The state of the s
4)		
-	& overridden in 1	ewa ? Har a sia
	& overridden in s static variables multiple instances	shored as
	multiple instances	W C C C C C C C C C C C C C C C C C C C
	multiple instances	a class?

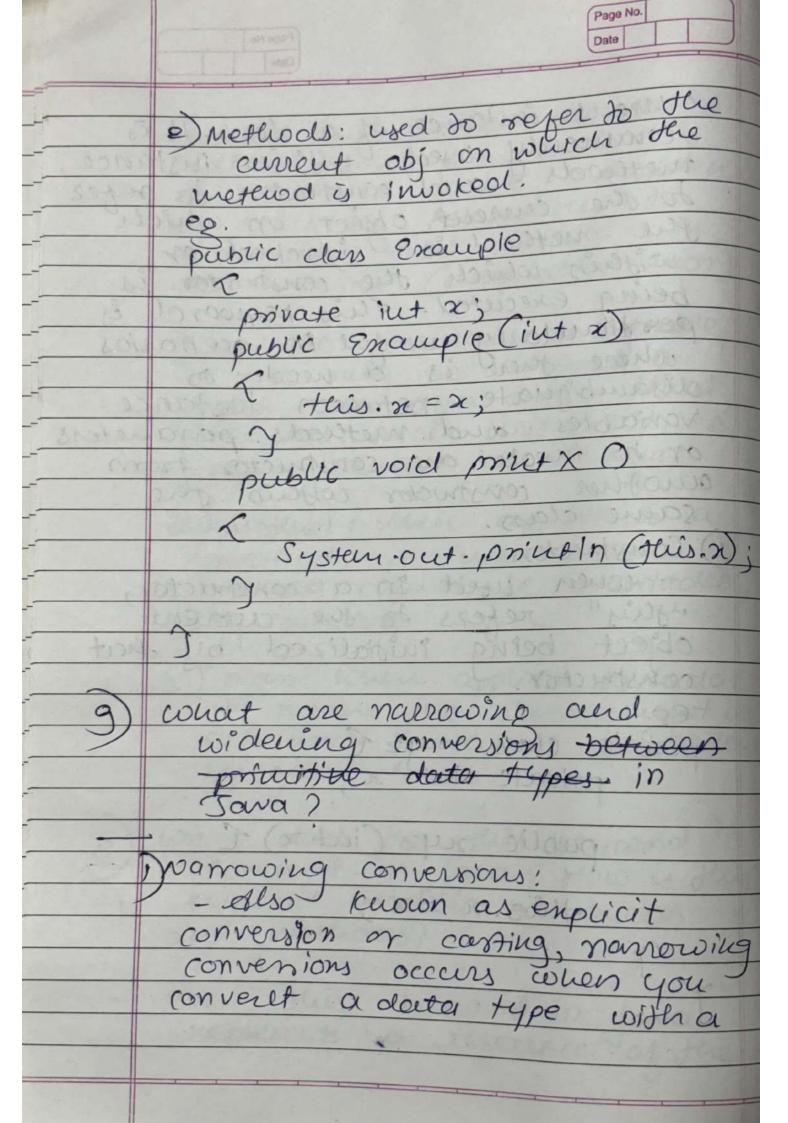


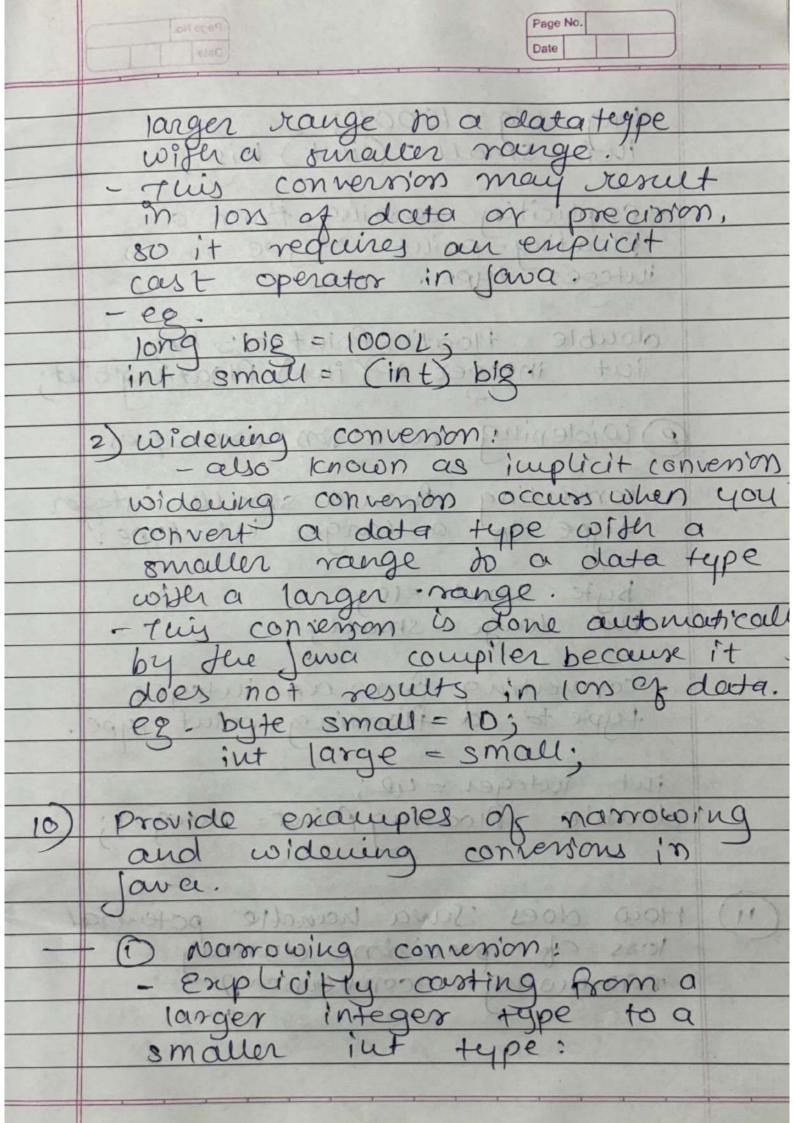
what is the role of the static keyword in the content of menon management. - The static ' keyword in Jama plays a significaent role in menery management by. allocated and accessed for certain elements mistrier a program. - All occiting memory space for static donables and methods in the method area where the class is loaded. - Alwaving static vontables to be shared Jamong all instances of acles, contributing to the - Enabling direct access to static methods without the need for object instantiation, reducing memery usage associated wife creating instances. - Enecuting Static blocks during class localing for initializing (static variables or performiting one-time setup tesks.

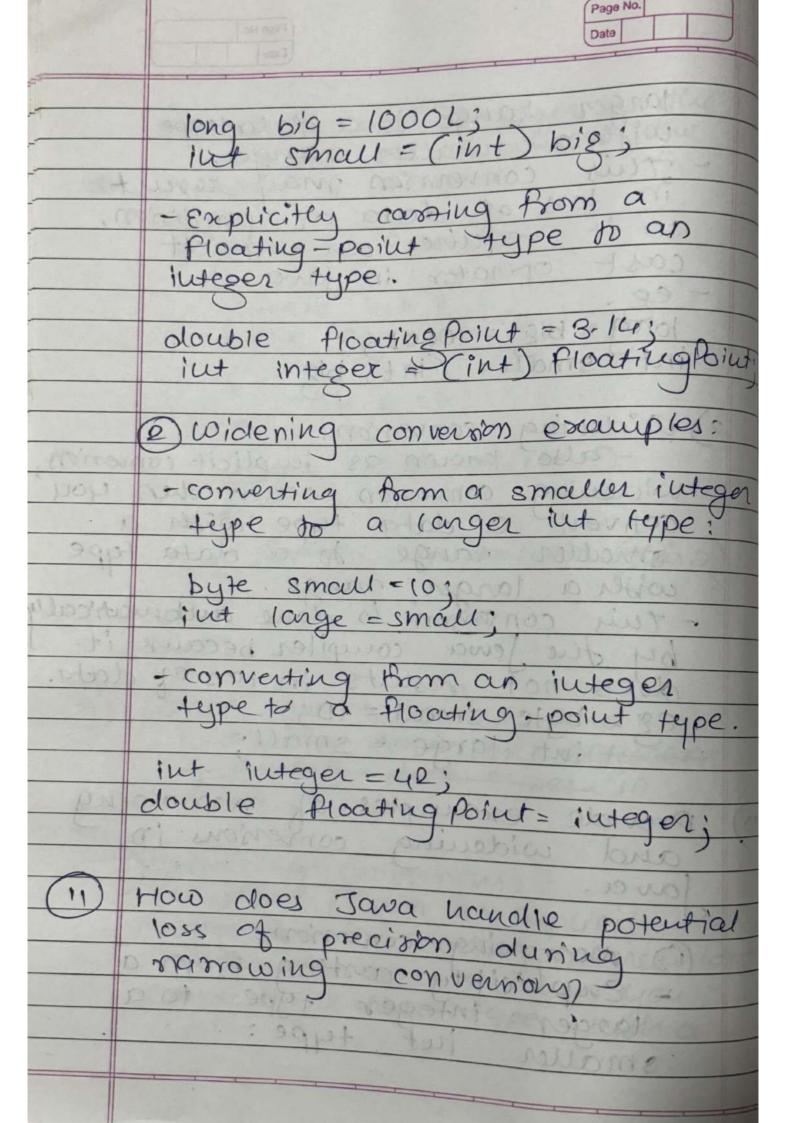


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	applied to a meterod declaration
	not Puterdool DD DE Course
01	by Minclowel Attempting
	Joversche a sihou misture will
	returer ever (compilation ever)
5	to object property and the description
	1) variable: It means the variable
	can only be amqued a
1	value once after uniting fruce
3	keyword. Once imboured, is
1	value connot be changed.
1	TO SERVENTING TO THE CHEE CHEE CHEEK LESSED,
-	2) Method: when applied to a
10	method, it means see
13	method camot be overnidales
1	by subclass.
1	3) class: when applied to a day
-	means the claim as
	occidence. It cannot be puseen
100	by other clarses.
1	Durit door le
	represent in lange and
33	represent in Jana 2 How is flig keyword used in constructors
	and material a construction
•	the all of
·	reasons keyword in laws
	the 1 this 1 keyword in sowar represents a reference of the
	of the









In java; when narrowing! convensions may results Ofn a pom à longer data type to a smaller one like from double

bilt, the language transcates

the ligher-order bits of the

value. This truncation means

that only the lower-order bits fleat fit withen the maller data type are retained. However, Jewa does not perform convenious, so sue result may not accurately represent fue original value. smaller lacter types. int int value = 1234567893 float float Value = int Value; double doublevalue = 3-14; int int value = (int) double value; 12) Explain the concept of automatic widewing convenion in Java. muchae promoting nature of Automatic wideling convenious is Java occurs when a value of a smaller data type is a migued to a variable of

Page No.

Page No. larger doctar type. This convenion is automatic becomes it does not require any emplicit carrier and is handeled by the Java compiler. The key idea is that Java allows you to amoger a value of a smaller doctar larger data type without: programmer. Puls is possible because the larger data type can represent a wirder range of values than the smaller douta types, so no Note af losing information what are the implications of narrowing and widering conversors on type conspatibility and data loss? involve promoting values to larger data types without losing douta. tuis ensures compatibility and

Page No. Date safety since larges douta types can eccomodate a wider range of values. For enample, amoning an integer value to a double uchiable automatically widers the integer to fit into the double without data 1085. on the other hand, namowing convenions may results in duta 1085 when values one converted to smaller data type. This occurs when the original value exceeds the range of the tanget data type. For instance, converting a double to an int truncates the decimal pant, potentially loving precision. one safe and preserve data integrity, while nonowing convenious require attention to avoid data loss of maintain precision.