coreJava || Day 5|| 25 july 2022

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1)WAP of static keyword with all possible ways. (variable, method,class,block)

**Java supports** [**Static Instance Variables**](https://www.geeksforgeeks.org/static-keyword-in-java/)**,** [**Static Methods**](https://www.geeksforgeeks.org/static-keyword-in-java/)**,** [**Static Block**](https://www.geeksforgeeks.org/g-fact-79/)**, and Static Classes.**

**package coreJAVA.Week\_1.Day\_5;**

**class Static\_fullDemo\_Code{**

**static int *id*;**

**// here i am using static block to initialise the static variable**

**static{**

***id*=101;**

**}**

**static void printMessage(){**

**System.*out*.println("Your Employee id :" + *id* );**

***id*++;**

**}**

**static class Static\_ClassDemo{**

**static void printMessageFromStaticClass(){**

**System.*out*.println("This from static inner class :");**

**}**

**}**

**}**

**public class Static\_fullDemo {**

**public static void main(String[] args) {**

**//Static\_fullDemo\_Code.printMessage();**

**//Static\_fullDemo\_Code.printMessage();**

**/\* Output**

**Your Employee id :101**

**Your Employee id :102**

**\*/**

**Static\_fullDemo\_Code.Static\_ClassDemo.*printMessageFromStaticClass*();**

**/\* output**

**This from static inner class :**

**\*/**

**}**

**}**

2)Explore =>storage of static methods and static variables in Java

3)Prove practically=>

3.1)Can we Overload static methods in Java

**package coreJAVA.Week\_1.Day\_5;**

**class Ques\_3\_Code{**

**static void overloadChecker(int a){**

**System.*out*.println("This is from method having Arguments :"+ a);**

**}**

**static void overloadChecker(){**

**System.*out*.println("This is from NO argument method : ");**

**}**

**}**

**public class Ques\_3 {**

**public static void main(String[] args) {**

**Ques\_3\_Code.*overloadChecker*();**

**Ques\_3\_Code.*overloadChecker*(101);**

**/\***

**Output 3.1**

**This is from NO argument method :**

**This is from method having Arguments :101**

**\*/**

**}**

}

3.2)Can we Override static methods in Java

**No, we can’t Override Static method because there will be ambiguity problem while calling them .**

**But while doing OverRiding we need to do it in child class and that we call them by their className.method() so there is no sense of overriding.**

3.3)Why main() method is declared as static?

* **In any Java program, the main() method is the starting point from where compiler starts program execution. So, the compiler needs to call the main() method**

**We declare main() method static so that compiler can call it without the creation of an object.**

* **First someOne has to call main method so who will create object for main method so First useCase.**

4)ls there any error in the below code snippet? If yes, identify the eror and give the

reason behind it.

public class Demo{

void ml (Demo demo){

System.out.println("Instance method");

}

static void ml(Demo d) {

System.out.println("Static method");

}

}

**Yes, there is error !!**

**We can not define two same method signature in same class That’s why it is showing Error.**

**other than this we can do this Using OverRiding but in child class**

**Ques 5.**

5)Will the following code snippet compile fine? If yes, what will be output after execution?

public class Myclass{

private static int x=10;

static {

X++;

}

static {

++x;

}

{

X--

}

public static void main(String[] args) {

Myclass obj = new Myclays();

Myclass obj2 = new Myclass();

Myclass obj3 = new Myclass();

System.out. println(x);

}

**O/p : first x=10**

**Then 10 => 11 => 12**

**Then at the time of object creation non-static block will executed each time we create object**

**So**

**For obj 12 => 11**

**` for obj2 11 => 10**

**For obj3 10 => 9**