**Questions on access specifies and non-access specifies**

**1. What are accesses specifies?**

**Access specifies indicates the visibility level of a member, the possible members are:**

* **Class**
* **Interface**
* **Instance Variable**
* **Constructors**
* **Methods**

**2. What are all the access specifies available in java?**

**The access specifies available in java are**

* **Public**
* **Private**
* **Default**
* **Protected**

**3. What is the scope of access specifies available in java?**

* **Public: Highly visible access specified can be accessed anywhere, even outside the project.**
* **Private: Highly restricted access specified, the private members can be accessed with the class only.**
* **Default: The scope of default access specified is within the package, if we don’t mention any access specified the java implicitly consider it as Default.**
* **Protected: A protected method can be accessed by the classes within the same package or by the subclasses of the class in any package.**

**4. Can the class or interface be private?**

**The class cannot be private because class is like a master copy out of which we can derive objects and we cannot able to override the members of a private class.**

**The interface cannot be private, the reason is in the child class if we want to override it is not accessible.**

**5. Can the class or interface be protected?**

**A class or interface cannot be protected.**

**6. What are all the access modifiers available in java?**

**The non-access modifiers (specifies) available in java are**

* **static**
* **final**
* **abstract**
* **synchronized**
* **volatile**
* **transient**
* **native**
* **strictfp**

**7. What is the difference between access specifies and access modifiers?**

**Access specifies and access modifiers be the same.**

**8. What are static methods?**

**Static methods are the methods which do not act upon the instance variable of a class; Static methods are declared as static.**

**9. Give me the reason when we use static methods?**

**If we want to access a method from a class, which has a private constructor than the only possible way is to make the method as static, i.e. Static methods can be accessed from the class even if the class has a private constructor.**

**10. What is the difference between instance variables and static variables (Class variables)?**

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| --- | --- |
| **Instance Variables** | **Static Variables** |
| **Instance variables are bound to the object.** | **Class variables are bound to the class.** |
| **Instance variables are created in the objects on heap memory.** | **Class variables are stored in static pool or method area** |

**11. What do you mean by static block?**

**A static block is a block of statements declared as a static, something like this:**

**Static {**

**Statements;**

**}**

**12. Is it possible to compile and run a java program without writing a main() method?**

**Yes, it is possible by using static block in the java program.**