



Static Keyword

# static keyword

- **static** is applicable for the following:
  1. Variables
  2. Methods
  3. Blocks
  4. Class

# Static variables

If you declare any variable as static, it is known as a static variable.

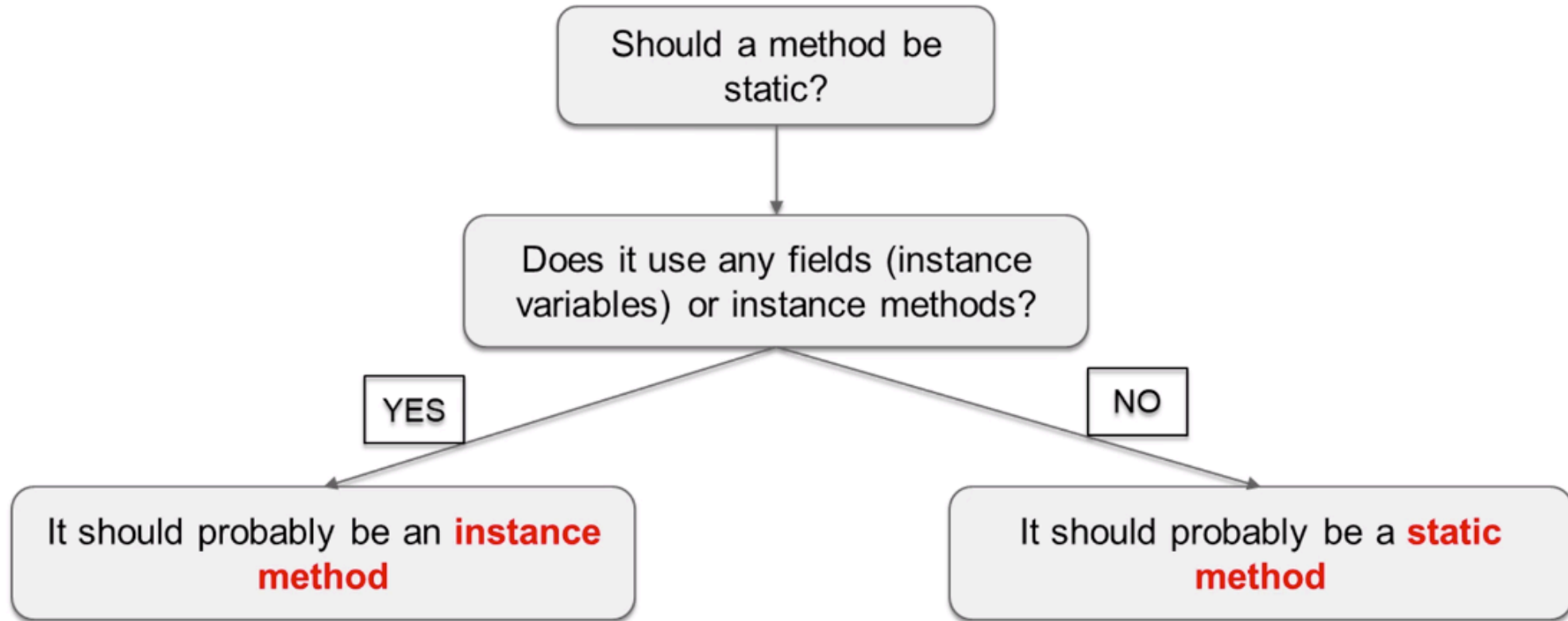
- The static variable can be used to refer to the common property of all objects (which is not unique for each object)
- The static variable gets memory only once in the class area at the time of class loading.
- A single copy of a class's static variable is shared by all instances of the class.
- If changes are made to static variable, all other instances will see the effect of the change.

# Static methods

If you declare any method as static, it is known as a static method.

- A method that can be called using a class name, without creating an object.
- Objects can also call static methods.

# Static or instance method?



Static method	Instance method
Static methods can not access instance methods and instance variables directly	Instance methods can access instance methods and instance variables directly
In static methods we can not use the “this” keyword	Instance methods can also access static methods and static variables directly

for instance initialization use setInfo method;  
for Static initialization use static block;  
static block is highest priority;

▫

# Static blocks

- **Static block** is a set of instructions that is run only once when a class is loaded into memory.
- A static block is also called a static initialization block.

when the static will be called outside of class, so Static blocks will be used.

```
public class Car {  
    static {  
        //static block  
    }  
}
```

# Static import

- With the help of **static import**, we can access the static members of a class directly without class name or any object.
- With the help of **import**, we are able to access classes and interfaces which are present in any package. But using static import, we can access all the static members (variables and methods) of a class directly without explicitly calling class name.