



null

(org.codehaus.groovy.runtime.NullObject)

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What's the result of these examples in groovy?

1. `println null.hashCode()`



NullPointerException

2. `null.each{
 println "looping around"
}`



nothing

3. `def author = null
println author.toString()`



„null“

4. `println null.equals(null)`



„true“



-> org.codehaus.groovy.runtime.NullObject (groovy 1.7.5) API

Method Summary	
Object asType (Class c)	Type conversion method for null.
Object clone ()	Since this is implemented as a singleton, you should avoid the use of the clone method
boolean equals (Object to)	null is only equal to null
static NullObject getNullObject ()	get the NullObject reference
Object getProperty (String property)	tries to get a property on null, which will always fail
int hashCode ()	
Object invokeMethod (String name, Object args)	Tries to invoke a method on null, which will always fail
boolean is (Object other)	The method is is used to test for equal references.
Iterator iterator ()	iterator() method to be able to iterate on null.
Object plus (String s)	Allows to add a String to null.
void setProperty (String property, Object newValue)	tries to set a property on null, which will always fail
String toString ()	



```
public int hashCode() {  
    throw new NullPointerException("Cannot invoke  
    method hashCode() on null object");  
}
```

```
public Iterator iterator() {  
    return Collections.EMPTY_LIST.iterator();  
}  
    Immutable empty list
```



```
public String toString(){  
    return "null";  
}
```

```
public boolean equals(Object to){  
    return to == null;  
}
```



-> NullObject is implemented as Singleton

-> extends `groovy.lang.GroovyObjectSupport`

-> extends `java.lang.Object`

-> 1x NullObject-Instance (Groovy) & null (Groovy? Java?)



<code>Object</code>	<code>asType(Class c)</code> Type conversion method for null.
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How do you think this is implemented in groovy?

```
println null.asType(Integer)
```

→ „null“

```
public Object asType(Class c){  
    return null;  
}
```



Some more of the examples

- ```
println null.equals(null)
```

 → „true“
- ```
println null.equals()
```

 → „true“
- ```
NullObject firstNullObj = new NullObject()
println null.equals(firstNullObj) → „false“
println firstNullObj.equals(null) → „true“
```
- ```
NullObject secondNullObj = new NullObject()  
println (firstNullObj == secondNullObj) → „false“  
println firstNullObj.equals(secondNullObj) → „false“
```
- ```
println firstNullObj.getClass()
println null.getClass()
```

 → „org.codehaus.groovy.runtime.NullObject “



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null?