

Effectively Final Variables in Java

Mar 27, 2016

Java 8 introduced a new term : **effectively final** variables. A variable which is **not declared as final** but whose value is never changed after initialization is effectively final.

```
for (int i = 0; i < 10; i++) {  
    new Thread(() -> {  
        System.out.println("i = " + i); // Does not compile!  
    }).start();  
}
```

The above code does not compile, the java compiler gives the below error message for variable i.

```
Error:(50, 45) java: local variables referenced from a lambda expression must be final
```

To fix the compile error, loop variable i, which is not final can be assigned to an effectively final variable:

```
for (int i = 0; i < 10; i++) {  
    int counter = i;  
    new Thread(() -> {  
        System.out.println("i = " + counter);  
    }).start();  
}
```

Java 8 compiler can detect that the variable **counter** remains unchanged and we can use a non-final local variable inside a lambda expression. If the value of the captured variable changes the compiler gives the same error as the above sample.

```
for (int i = 0; i < 10; i++) {  
    int counter = i;  
    new Thread(() -> {  
        System.out.println("i = " + counter);  
    }).start();  
}
```

```
System.out.println("i = " + counter); //counter value changes,
}).start();
counter++;
}
```

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MarquisDeSang — This does not help at all, it's confusing because it's lacking essential conversion step and where do you place

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ilkinulas — HiFind the GameObject in the scene.and callgo.GetComponent<button>().onClick.Invoke ();

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Tobber Harley — If you want proper hard edges on the cube, I'm pretty sure you need all 24 vertices to get correct normals on all

Neden Kotlin?

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Ertuğrul Şahnagil — Yazınızı baştan sona okudum. Yeni mezun biri olarak kendime bir programlama dili üzerine gerçekten yıllarımı

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