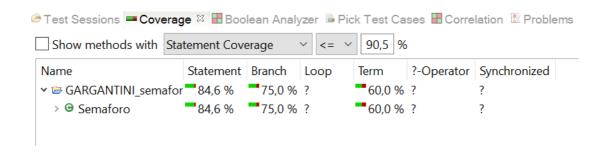
1. JAVA + TESTING

. . . .

Scrivo il caso di test:

```
@Test public void testDueCicli()
```

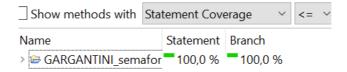
ho copertura:



Alcuni statement non vengono coperti. In particolare i return false non vengono mai coperti.

Scrivo un caso di test solo per quelli (**public class** StatementCoverage)

Ottengo copertura 100% anche del branch.



MCDC coverage

```
Voglio coprire con MCDC questa decisione:
```

```
if (sem < 0 | sem > 1 | color < 0 | color > 2)
return false;
```

Essendo in OR, devo prendere tutte false tranne quella che voglio testare

sem < 0	sem > 1	color < 0	color > 2	DEC	
T	F	F	F	T	
F	F	F	F	F	
F	T	F	F	T	
F	F	F	F	F	Skip vedi 1
F	F	T	F	T	
F	F	F	T	T	

Ottengo copertura 100% sulla decisione:

((OR	sem > 1	 OR	color < 0	OR	color > 2)	Result
		F	F	F	F	F	F	F		0
		F	Т	T	Т	Х	Т	X		1
		F	F	F	F	F	Т	T		1
		Т	Τ	X	Т	Х	Т	Х		1
		F	F	F	Τ	T	Т	Х		1

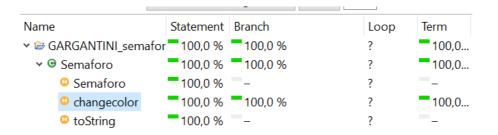
 $TT \rightarrow$

 $\begin{array}{c} FT \rightarrow \\ TF \end{array}$

:lass	Semaforo	∨ Cor	ndition: (color ==	2 AN	ND luce[sem] == 1)
(color == 2	AND	luce[sem] == 1)	Result	Test Cases (Number of Executions)
	T	F	F		0	MCDCTest:testDec2 (1) Coverage: 25,0
	F	F	x		0	MCDCTest:testDec1 (1), MCDCTest:testDec2 (3) Coverage: 25,0
	T	Т	T		1	MCDCTest:testDec2 (1) Coverage: 50,0

Altre decisioni

Class: Semaforo \vee Condition: ((color == 0 AND luce[sem] == 2) AND luce[altroSem] == 2)												
(luce[altroSem] == 2		Result			
		Т	Τ	Т		F	F		0			
		Т	F	F		F	х		0			
		Т	Т	Т		Т	T		1			
		F	F	х		F	Х		0			



Randoop

