**Static and Dynamic Scoping Example**

Determine the result of this program using

* static scoping rules (like in Scala)
* dynamic scoping

[val](http://scala-lang.org) x = 1

[val](http://scala-lang.org) y = 2

[def](http://scala-lang.org) p() = x + y

[def](http://scala-lang.org) q(p: Int => Int) = p(x \* y)

[def](http://scala-lang.org) f = {

[val](http://scala-lang.org) x = 2

q(p + \_)

}

[def](http://scala-lang.org) g(q: Int => Int) = {

[val](http://scala-lang.org) y = 3

[def](http://scala-lang.org) p() = x - y

q(f)

}

print(g(\_ + 2))