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1  #= This is a code sample for the Julia language
2  (adapted from http://julialang.org) =#
3  function mandel(z)
4      c = z
5      maxiter = 80
6      for n = 1:maxiter
7          if abs(z) > 2
8              return n-1
9          end
10         z = z^2 + c
11     end
12     return maxiter
13 end
14
15 function helloworld()
16     println("Hello, World!") # Bye bye, MATLAB!
17 end
18
19 function randmatstat(t)
20     n = 5
21     v = zeros(t)
22     w = zeros(t)
23     for i = 1:t
24         a = randn(n,n)
25         b = randn(n,n)
26         c = randn(n,n)
27         d = randn(n,n)
28         P = [a b c d]
29         Q = [a b; c d]
30         v[i] = trace((P.'*P)^4)
31         w[i] = trace((Q.'*Q)^4)
32     end
33     std(v)/mean(v), std(w)/mean(w)
34 end

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