do i1=1,4
   j(1)=i1
   do i2=1,4
      j(2)=i2
      do i3=1,4
         j(3)=i3
         do i4=1,4
            j(4)=i4
            if (j(1) .eq. j(2) .or. j(1) .eq. j(3) .or. j(1) .eq. j(4)) cycle
            if (j(2) .eq. j(3) .or. j(2) .eq. j(4)) cycle
            if (j(3) .eq. j(4)) cycle
            print*,j(1),j(2),j(3),j(4)
         end do
      end do
   end do
end do

Invited Article

Robert J. Boik, Ben Haaland
Second-Order Accurate Inference on Simple, Partial, and Multiple Correlations

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