xquery version "3.1";

(:~

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: @version 1.0:)

declare variable $local:num := math:log10(12345);

(

let $map := map { 'R': 'red', 'G': 'green', 'B': 'blue' }

return (

$map?\* (: 1. returns all values; same as: map:keys($map) ! $map(.) :),

$map?R (: 2. returns the value associated with the key 'R'; same as: $map('R') :),

$map?('G','B') (: 3. returns the values associated with the key 'G' and 'B' :)

),

declare function local:city($country as node()\*) as element (country) {

for $country in doc('factbook')//country

where $country/@population > 100000000

let $name := $country/name[1]

for $city in $country//city[population gt 1000000]

group by $name

return

element country { attribute type { $name },

$city/name }

};

return

('A', 'B', 'C') => count(),

<root>{local:city(.) + $local:num}</root>