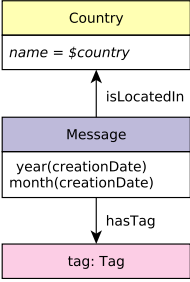


## BI / read / 13

BI 1	query	BI / read / 13			
BI 2	title	Popular tags per month in a country			
BI 3	pattern	 <pre> graph TD     Country[Country name = \$country]     Message[Message year(creationDate) month(creationDate)]     Tag[Tag: Tag]     Message -- isLocatedIn --&gt; Country     Message -- hasTag --&gt; Tag           </pre>			
BI 12	desc.	<p>Find all Messages in a given Country, as well as their Tags.</p> <p>Group Messages by creation year and month. For each group, find the 5 most popular Tags, where popularity is the number of Messages (from within the same group) where the Tag appears.</p> <p>Note: even if there are no Tags for Messages in a given year and month, the result should include the year and month with an empty popularTags list.</p>			
BI 17	params	1	country	String	
BI 19	result	1	year	32-bit Integer	C
BI 20		2	month	32-bit Integer	C
BI 21		3	popularTags	TagPairs	C
BI 22					(tag.name [String], popularity [32-bit Integer])
BI 23					pairs, sorted descending by popularity, then
BI 24					ascending by tag.name
BI 25	sort	1	year	↓	
		2	month	↑	
	limit	100			
	CPs	1.2, 2.2, 2.3, 3.2, 6.1, 8.3, 8.5			