

## BI / read / 21

query	BI / read / 21				
title	Zombies in a country				
pattern	<div><div>1. zombies = collect(zombie)</div><div><div><div>Country</div><div>name = \$country</div></div><div><div>City</div><div></div></div><div><div>zombie: Person</div><div>creationDate &lt; \$endDate &amp; messageCount / months &lt; 1</div></div><div><div>message: Message</div><div>creationDate &lt; \$endDate</div></div><div>City -- isPartOf --&gt; Country</div><div>City -- isLocatedIn --&gt; zombie</div><div>zombie -- hasCreator --&gt; message</div></div><div>2. for each zombie, calculate: zombieScore = zombieLikeCount / totalLikeCount</div><div><div><div>zombie: Person</div><div>IN zombies</div></div><div><div>likerPerson: Person</div><div>creationDate &lt; \$endDate</div></div><div><div>Message</div><div></div></div><div><div>likerZombie: Person</div><div>creationDate &lt; \$endDate &amp; likerZombie IN zombies</div></div><div>likerPerson -- likes --&gt; Message</div><div>likerZombie -- likes --&gt; Message</div><div>zombie -- hasCreator --&gt; Message</div></div><div>totalLikeCount = count(likerPerson)</div><div>zombieLikeCount = count(likerZombie)</div></div>				
desc.	<p>Find zombies within the given country, and return their zombie scores. A zombie is a Person created before the given endDate, which has created an average of [0, 1) Messages per month, during the time range between profile’s creationDate and the given endDate. The number of months spans the time range from the creationDate of the profile to the endDate with partial months on both end counting as one month (e.g. a creationDate of Jan 31 and an endDate of Mar 1 result in 3 months).</p> <p>For each zombie, calculate the following:</p> <ul style="list-style-type: none"><li>zombieLikeCount: the number of likes received from other zombies.</li><li>totalLikeCount: the total number of likes received.</li><li>zombieScore: zombieLikeCount / totalLikeCount. If the value of totalLikeCount is 0, the zombieScore of the zombie should be 0.0.</li></ul> <p>For both zombieLikeCount and totalLikeCount, only consider likes received from profiles that were created before the given endDate.</p>				
params	1	country	String		
	2	endDate	Date		
result	1	zombie.id	64-bit Integer	R	
	2	zombieLikeCount	32-bit Integer	A	
	3	totalLikeCount	32-bit Integer	A	
	4	zombieScore	64-bit Float	A	zombieLikeCount / totalLikeCount
sort	1	zombieScore	↓		
	2	zombie.id	↑		
limit	100				
CPs	1.2, 2.1, 2.3, 2.4, 3.2, 3.3, 5.1, 5.3, 8.2, 8.4, 8.5				