# Test // Backend



### **APPENDICES**

You will find enclosed to this document, 2 files:

- 1/ A list of a few thousands of job offers:

```
profession_id,contract_type,name,office_latitude,office_longitude
2,FULL TIME,Dev Full Stack,48.8768868,2.3091203
```

- 2/ A list of "professions" (cf. "profession id" above):

```
id,name,category_name
16,Développement Fullstack,Tech
```

### **EXERCISES / QUESTIONS**

## 01 / 03 . Exercise: Continents grouping

Using the previous data, your goal is to develop a script which will return the count of job offers per profession category per continent.

#### Exemple:

	TOTAL		TECH	
-		-		
	1		1	
-		-		
	1		1	
-		-		
1	0		0	
	-	TOTAL     1	TOTAL	TOTAL   TECH

# 02 / 03 . Question: Scaling?

Now, let's imagine we have 100 000 000 job offers in our database, and 1000 new job offers per second (yeah, it's a lot coming in!). What do you implement if we want the same output than in the previous exercise in real-time?

NB: no code necessary for this question

# 03 / 03 . Exercise: API implementation

Now, we would like those data to become usable! What would you set up to have this data consumable by an API? Which filters would you propose?

# **FAQ**

#### Which languages should I use?

We are looking for someone with knowledge of Ruby and Elixir and potentially Go, but above all we are looking for a PRAGMATIC and CURIOUS person who knows how to use the right technologies at the right time and for the right purpose. So, the choice is on your side! (and do not hesitate to explain your choice :))

### What is the expected rendering?

We simply expect to see a well organized Git repository with a beautiful history that will allow us to better understand your reflection.