

1h 57m  
left

## 1. Problem 1 : Evolution of Sales Volume



ALL



### General notes for the exam :

You can access all the data via your usual import package (e.g PANDAS package in python):

In Python:

```
import pandas as pd  
df_product = pd.read_csv('product_data.csv')
```

In R:

```
df_product <- read.csv('product_data.csv')
```

All needed packages are available in the test:

Non exhaustive list: pandas, numpy, sklearn, scipy, ...

Do not hesitate to **COMMENT** on your code and explain your ideas.

Try and answer all questions fully. If running out of time, please note that questions 6, 8 and 9 deliver the most points in the scoring system.

Throughout this entire exam, your goal will be to help a grocery company to better use its marketing campaigns.

### How to debug your code:

To see the result of any print statements, you should:

1. Choose the tab "Custom Input" next to the "Test Results" tab.
2. Fill in the text box that appears with: 'BCG'. You do not have to put your code in this box.

