

# Backend Engineer Test

## The assignment text goes below:

Imagine you have a CSV file with three columns:

1. Department Name
2. Date
3. Number of sales

You should process that file and create a new file with only two columns: "Department Name" and "Total number of sales" (a sum of sales for all dates for this department).

### Example:

*Original file:*

```
1 New York,2020-01-01,100
2 Boston,2020-01-01,50
3 New York,2020-01-02,30
```

*The output file:*

```
1 New York,130
2 Boston,50
```

- The order of rows in the original file is undefined (i.e. the file is unsorted).
- There's no special requirement on the ordering for the output file.
- Consider the case when the input and output files are too large to fit into memory.
- You can use any tools and technologies you may find useful, keeping in mind that the solution is expected to be simple, highly performant, and memory efficient.
- Python is the preferred language for the implementation.
- Please provide a textual explanation of how the implemented algorithm works.

**Extra question:** estimate the computational complexity of the implemented solution using the Big O notation.

Sin etiquetas